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THE
CLEMSON
AGRICULTURAL
COLLEGE
RECORD

THIRTY-THIRD YEAR

CATALOGUE
1925-26

ANNOUNCEMENTS

1926 - '27

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CALENDAR FOR 1926

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CALENDAR FOR 1927

THE FRANKLIN CO. CO.

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CLEMSON COLLEGE CALENDAR

Session 1926-1927.

1926

First Semester.

- Aug. 31—Freshmen arrive. Cadet Officers, Company Commanders and first Sergeants report for duty.
- Sept. 1—Work for Freshmen begins. Opening of the 34th session.
- Sept. 2-7—Freshman Week.
- Sept. 6—Re-examinations and make up work for old students begin at 8:30 A. M.
- Sept. 7—Old students arrive. Matriculation and registration. Re-examination and make up work end.
- Sept. 8—Work for old students begins.
- Oct. 15—Stated meeting of Board of Trustees.
- Nov. 6—First half of semester ends.
- Nov. 25—Thanksgiving Day—A holiday.
- Dec. 24—First day of Christmas holidays.

1927

- Jan. 4—Students return from Christmas vacation by 11:30 P. M.
- Jan. 19—Lee's birthday—Half holiday.
- Jan. 29—First semester ends.

Second Semester.

- Jan. 31—Second semester begins.
- Feb. 22—Washington's birthday—A holiday.
- Mar. 18—Calhoun's birthday—Half holiday.
- Mar. 18—Stated meeting of Board of Trustees.
- Mar. 26—First half of second semester ends.
- May 4—Stated meeting of Board of Visitors.
- May 28—Examinations for Senior Class end.
- May 30—June 4—Make up week for Senior Class.
- June 4—All examinations end.
- June 5—Commencement exercises begin. Baccalaureate sermon
Closing exercises of the Y. M. C. A.
- June 6—Closing exercises of the Literary Societies. Military exercises. Address of Alumni Orator. Alumni meeting.
- ✓ June 7—Commencement Day. Graduating Exercises.
- June 17—Stated meeting of the Board of Trustees.
- July 8—Scholarship and entrance examinations at the county seats.
- July 11—Last day for receiving scholarship applications.

Note: The above schedule is subject to change by the Faculty.

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Term Expires 1928

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G. W. Duvall Cheraw

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Seventh District

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Clerk

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 Mess Officer

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 Assistant Coach

MONROE PARKER GILLAM,
 Assistant Coach

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 General Secretary, Y. M. C. A.

RICHARD HALLUM SMITH, B. S.
 Assistant Secretary Y. M. C. A.

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 Assistant Chemist (Miscellaneous Analysis)

MARGARET E. GASQUE,
 Clerk to the Board of Fertilizer Control

COMMENCEMENT SPEAKERS—JUNE 1925**Baccalaureate Sermon**

Dr. T. V. McCaul Gainesville, Fla.

Commencement Address

Dr. A. A. Murphree Gainesville, Fla.

STANDING COMMITTEES OF THE FACULTY*

Discipline—Earle, Brackett, Calhoun, Daniel, Doggett, Martin Barre.

Re-examination and Promotions—Martin, Brackett, Calhoun, Daniel, Dargan, Doggett, Earle, Littlejohn.

Entrance Requirements—Daniel, Calhoun, Holmes, Littlejohn, Martin.

Schedule—Lee, Aull, May, Henry, Holmes, Cheatham, Littlejohn, Martin, Mitchell, Rhodes.

Student Petition—Littlejohn, Henry, Martin, Rhodes.

Athletic—Henry, Calhoun, Shanklin, Mitchell, Saunders.

Library—Bryan, Calhoun, Dargan, Henry, Bradley, Doggett.

Irregular Students—Hunter, Aull, Bradley, Klugh, Mitchell.

Catalogue—Littlejohn, Daniel, Lee, Eaton, Mitchell, Rosenkrans.

Graduate Work—Earle, Brackett, Calhoun, Daniel, Doggett

Religious Services—Earle, Bradley, Holmes

Chapel Entertainments—Daniel, Johnstone, Martin, Henry.

Text-book—Shanklin, Cheatham, Harris, Mitchell.

Summer School—Calhoun, Daniel, Doggett, Henry Crandall, Klugh, Littlejohn.

Rules—Calhoun, Henry, Klugh, Littlejohn, Shanklin.

Chapel Music—Carpenter.

* The President is, ex officio, a member of all committees. The first named in each instance is chairman.

PART II.—ADMISSION—EXPENSES

ADMISSION TO COLLEGE

Session—1926-1927

I.—General Requirements.—All applicants must be at least sixteen years of age at the time of entrance and must be free from contagious or infectious disease. A certificate of good moral character and honorable discharge from the last school attended is also required.

11.—Scholastic Requirements.—For admission to college, graduation from an accredited four year high school with not less than 15 units is required. A State high school diploma will be required of applicants who have had the opportunity to earn this diploma.

II.—Scholastic Requirements.—For admission to college the applicant must present fifteen units from an accredited high school, of which three units must be in English, two and one-half in mathematics, and two in history. The remaining seven and one-half units may be selected from the list of high school subjects.

An applicant who has not completed the course of study in high school will be required to stand entrance examinations.

III.—How to Make Application.—Those desiring to enter should write the Registrar, Clemson College, S. C., for the prescribed application blank. On this blank should be given a list of the subjects studied in school, the time devoted to each, and the quality of the work. The application should be returned to the college before August 15 or sooner if possible.

IV.—Methods of Admission.—An applicant may be admitted; (a) by certificates of graduation from high school; (b) by examination; (c) by individual approval for special students; or (d) by a combination of these methods.

(a) A certificate of graduation from high school signed by the proper official will admit an applicant to the freshman class without examination, provided the certificate entitles the holder to fifteen units. No credit will be given on certificate for work done in high school unless the applicant is a graduate of the school.

b) **Examination.**—Applicants who are not graduates of secondary schools or applicants who are unable to enter on certificate will be required to take entrance examinations. Any of all entrance requirements may be met by examination. Candidates having examinations to stand are advised to take those examinations held by each county superintendent of education on the second Friday in July. These examinations are for the award of scholarships and for credit toward entrance. If by these exami-

nations the candidate finds himself unprepared, he will be saved the expense of a trip to the college in September. Entrance examinations are also held at the opening of college in September.

V.—Admission of Special Students.—An applicant not less than twenty years of age may be admitted to the college without fulfilling the entrance requirements, provided he gives evidence of seriousness of purpose and of sufficient preparation to pursue the course with profit. Such a student must satisfy all requirements for admission before becoming a candidate for a degree.

A limited number of persons in good standing and over twenty-one years of age may be admitted as special students with the opportunity to pursue special lines of study or investigation in any of the subjects taught in the college, provided the work can be scheduled. Such students are not permitted to live in the barracks, but are subject to general regulations of the college requiring regular attendance, good conduct and diligent prosecution of the studies selected. Degrees are not given to students in special courses, but a certificate of proficiency will be given when the work completed is deemed worthy of it. Room and board may be secured in the community at reasonable rates.

VI.—Admission to Advanced Standing.—Work that has been taken in other colleges will be credited for an equivalent amount of work so far as it applies to any course offered in the college. The applicant must present: (a) a letter of honorable dismissal from the institution last attended, and (b) an official transcript of his record, including entrance credits. College credits given by transfer are provisional and may be cancelled at any time if the student's work is unsatisfactory. A student coming from another institution must spend at least one regular session in the college before he is eligible to apply for a degree. College credit may be given a graduate of an accredited secondary school by examination only.

High School Subjects Accepted For Admission To The Freshman Class

English—		Laboratory Sciences—	
Grammar (High School text completed)	1	General Science	1
Composition and Literature	3	Biology	1
History—		Chemistry	1
Ancient (full course)	1	Physics	1
Ancient short course	$\frac{1}{2}$	Physical or High School Geography	1
Community Civics (half year)	$\frac{1}{2}$	Modern Language—**	
Modern History	1	French	2
American History and Government, or Civics	1	Spanish	2
		German	2
Mathematics—		Vocational Subjects—	
Arithmetic	$\frac{1}{2}$	Agriculture	1 to 4
Algebra, to quadratics	1	Bookkeeping	1
Algebra, through quadratics	$1\frac{1}{2}$	Manual Training	1 to 2
Algebra, through progressions and binomial theorem	2	Stenography and Typewriting	1 to 3
Plane Geometry	1		
Solid Geometry	$\frac{1}{2}$		
Latin—*			
Beginners' or First Year and Caesar, 4 books	2		
Cicero, 6 orations	1		
Virgil, 6 books	1		

*No credit is given for 36 weeks work in Beginners' or First Year Latin.

**Credit depends upon the time devoted to the subject and the quantity of work accomplished. No credit is allowed for less than 72 weeks work in Modern Languages.

General Information Regarding Admission of Students to all Courses

Students desiring to enter College should apply to the Registrar for application blanks, and these, properly filled out, should be returned to the Registrar as early in the summer as possible, and in no case later than August 15th. If later the applicant may be crowded out.

Certificates of good moral character are required of all candidates; and if the candidate comes from another college, this certificate must show that he was honorably discharged.

In the admission of students who have met the requirements of the College, the following will be observed.—

1. Students must undergo a medical examination, and no student will be admitted who is not healthy and free from contagious diseases including tuberculosis and venereal diseases. Vaccination is required of all students admitted.

2. In case the number of applicants exceeds the capacity of the College, students will be apportioned among counties in proportion to representation in the House of Representatives, under the following rules and regulations:

(a) As between applicants of equal preparation, the eldest will have the preference.

(b) Other things being equal, the first applicants will receive first consideration.

(c) When a county has not sent its quota, the places thus left shall be apportioned among the other applicants.

(d) Provided there is room in the barracks after the needs of the State have been met, students from outside the State may be admitted, and when once admitted may continue in College until the completion of their courses.

3. Applicants not entering promptly at the required date will have their rights given to applicants next on the roll.

Students upon arrival at the College at the opening of the session must report at once to the Registrar's office and matriculate before they will be assigned to quarters in the barracks. No student will be admitted to any of the classes or examinations of the College before matriculation and payment of fees.

Matriculation is equivalent to a pledge to conform to the rules of the College.

FEES AND EXPENSES

Settlement of College Fees.—Remittances should be made in cash, by money order New York Exchange, or by local check, made payable to S. W. Evans, Treasurer. All required fees must be paid before a student can be assigned to a room in the barracks or permitted to begin work.

The fees and living expenses will be approximately as listed below. A leaflet giving the exact cost, including uniforms, will be mailed to the parents of all applicants prior to the opening of college in September. The cost of books, which varies with the class and course, is not included in the figures given below:

Living Expenses—

Board at \$18.50 a month	\$166.50
Laundry at \$1.50 a month	13.50
Heat, light & water at \$2.10 a month	18.90
Total Living Expenses	\$198.90

Fees—

Student Activity Fee	\$12.00
Incidental Fee	9.00
Laboratory Fee	2.25
Breakage Fee	3.00
Hospital Fee	11.25
Matriculation Fees	3.00
Total for All Required Fees	\$40.50

Total Living Expenses and Required Fees \$239.40

Tuition for resident students who pay, add 40.00

Non-resident students pay \$80.00 tuition

These figures do not include the cost of uniforms. See information in paragraph header "Uniforms."

All payments are to be made quarterly in advance as follows:

Payable on	High, with Tuition	Medium, with Free Tuition	Low, with Scholarship
Entrance	\$74.35	\$64.35	\$39.35
Nov. 6, 1926	68.35	58.35	33.35
Jan. 29, 1927	68.35	58.35	33.35
Mar. 26, 1927	68.35	58.35	33.35
Total	\$279.40	\$239.40	\$139.40

Uniforms.—All students are required to wear the regulation uniform of the college. The cost of the uniform garments needed by a student must be deposited with the Treasurer of the college at matriculation in September. The uniforms are made to individual measure and are purchased on the most favorable contract obtainable from a reputable manufacturer. The uniforms are the property of the student, the college merely acts as agent for the student and makes no charge or profit for handling.

If a student takes proper care of his uniforms and certain garments are serviceable for a second year, he will not be required to purchase a complete new outfit. The cost, therefore, to old students may be considerably reduced.

Any uniform allowances made to R. O. T. C. students by the Federal Government will be credited to the individual when the full amount of the commutation is received by the college.

Shoes: In addition to ordinary high top black shoes each cadet will be required to have one pair of tan shoes, army style.

Medical Fee: The medical fee paid by each student is intended to cover all ordinary cases of sickness and the treatment and medicines necessary. It is not intended to cover fees of doctors or specialists called into consultation, for performing operations, for special nurses, or for any medical or surgical attentions performed away from the college. Such expenses must be borne by the parent. The right of the college surgeon, with the approval of the President of the college, to incur in behalf of any student under his care any of these extra services is hereby expressly reserved.

Student Activity Fee: This fee entitles a cadet to admission to all lyceum entertainments, athletic games, privilege of Y. M. C. A. Building, and subscription to the college papers, "The Tiger" and "The Chronicle."

Breakage. The breakage fee of \$3.00 is a deposit to cover damages or destruction of College property when individual responsibility can not be located. A student will be required to pay directly to the Treasurer for any damage done to College property for which he is personally responsible. The occupants of a room will be held responsible for any damage to property in the room.

Tuition. Tuition is \$40.00 per session, payable quarterly. Free tuition is granted to residents of South Carolina unable to pay the same provided they comply with the State laws. All applicants for free tuition must file with the College the prescribed application to the State Board of Public Welfare. This blank will be sent to all applicants by August 15th, and must be returned properly filled in before the opening of College.

Immediately after the opening of College, the application is forward to the State Board of Public Welfare, which Board is required by law to investigate the financial standing of the parents or guardian, or the applicant himself if he is of age. This Board reports its finding, together with its recommendations, to the Clemson College Board of Trustees, who may revoke or confirm the recommendations.

Any person required to pay tuition may appeal to the State Board of Education as provided by law.

Applicants filing the prescribed form will be granted free tuition pending investigation by the State Board of Public Welfare and action by the Board of Trustees. Applicants for free tuition will be notified of the results of the investigation by about the first of January.

Non-resident students pay \$80.00 tuition.

All Students are required to provide themselves with two mattress covers, and two clothes bags. These are regulation articles and can be secured only at the Cadet Exchange. They will last for the entire course of four years and can often be bought second hand.

Refund to Students. Refunds will be made to students under the following rules:

1 A refund for uniforms will not be guaranteed to students who withdraw from the college after the uniforms have been ordered. If order cannot be cancelled the uniforms will be sent to the cadet upon receipt of the same.

2 A refund for **living expenses** will be made at the rates charged, but no refund will be made for interruptions of less than two weeks or in cases of discharge issued less than two weeks from the end of the current quarter.

3 No fees will be refunded.

4. A refund of **all** moneys, except the matriculation fee of \$3.00 and \$1.00 per day for board, etc. will be made to a student who fails to meet the entrance requirements and who leaves college within ten days of the date of his matriculation; provided, however that the refund for uniform cannot be guaranteed if the same has been ordered.

5 The college will not be liable for articles lost or stolen in the barracks.

6. The college will not be liable for lost or damaged laundry, unless reported within two days after the date upon which laundry was due to be delivered and then not more than the actual depreciated value of such articles as have been lost or damaged.

Optional Expenses. It is not possible to give an estimate of a cadet's expenditures for such amusements as dancing, moving pictures, etc. This depends largely upon the disposition of the young man. The college endeavors to reduce to a minimum the temptation to spend money needlessly, but the authorities cannot be responsible for a cadet's private expenditures. This must be a matter between him and his parents.

Subscription to the "Annual" and membership in the Literary Societies are very desirable, but are optional. These will cost approximately \$5.00 for the session.

STUDENT HELPS

There is little opportunity at Clemson for a cadet to pay any large part of his expenses by working. There are few jobs that he can get, and his time is so fully taken up by college work that little remains except that which should be used in recreation and in participation in student activities. A substantial part of a college education lies outside the curriculum. If a student must labor every spare hour to pay his way, he not only dissipates his energy in non-educational effort, but he misses some of the

choicest privileges of college life. He misses the chance to read in the library, to write for the college publications, to prepare for the literary society work, to engage in athletics and the many other items that go to make up college life at its fullest.

It is a much better investment for a student to borrow the small amount of money necessary to pay his way at Clemson than for him to take up all his spare time in non-educational effort.

Scholarships and membership in the R. O. T. C. are available sources of help to pay a cadet's way through Clemson. There are also several loan funds available under certain conditions to needy boys.

In the line of work that does not interfere with classes or recreation are about forty positions as waiters in the messhall. These positions require only about fifteen minutes before each meal and pay \$8.00 per month—about half the cost of board.

FOUR-YEAR SCHOLARSHIPS

Statement of the State Laws and College Rules Governing the Award of Four-year Scholarships

1. Each county is allowed as many scholarships as it has representatives in the General Assembly. The total number for the State is now one hundred and seventy. The number of vacancies in any particular county can be learned by making inquiry of the Registrar of Clemson College.

2. Scholarship students are required to take one of the Agricultural Courses, except that one scholarship per county is allowed in the Textile Course. Scholarship students are not permitted to take the Engineering or other courses.

3. Each scholarship pays \$100.00 per session in cash, and allows free tuition, worth \$40.00 more. The regular scholarship is good for four consecutive years, unless terminated by the student's failure to maintain himself in his class and comply with the rules of the College.

The Trustees have ruled that failure to maintain himself cannot be excused on the grounds of sickness or other Providential reason.

4. A competitive examination is used as a basis for awarding the scholarships. The examinations are conducted by the County Superintendents of Education at the county seats, on the second Friday in July, from 9 A. M. to 4 P. M. (July 9, 1926)

5. All applicants are required to furnish the Registrar of Clemson College not later than July 12, 1926, the prescribed certificates showing financial inability, and the application form showing school preparation. The applicant may not be considered unless the above papers are received within the specified time.

6. The examination questions are prepared and the papers

graded by the Clemson Faculty. The names of the applicants who pass the examinations and who are otherwise qualified are forwarded to the State Board of Public Welfare together with the certificates of financial inability. The State Board of Public Welfare then makes an investigation into the financial standing of the applicant, his parent or his guardian. The said Board reports its findings together with its recommendations to the Clemson College Board of Trustees. This Board makes a recommendation to the State Board of Education based upon the result of the examinations and the findings of the State Board of Public Welfare. The State Board of Education makes the final awards and hears appeals, as provided by law.

7. The applicant is tested by competitive examinations in agriculture, English, and mathematics.

8. The College has a right to reject any applicant who in respect to age (16 years at the time of entering), examinations, or in any other respect, fails to meet its requirements for admission.

9. The following are not eligible for scholarship appointments:

(a) A person who during the current year has won or holds a scholarship at another State institution.

(b) A person who has been in attendance at Clemson College or "any other institution of higher learning known as a college or university,"—provided however, that this condition shall not apply if there are no other eligible candidates for the scholarship.

(c) A person who has forfeited a scholarship at Clemson College or any other State institution by failure to maintain himself.

(d) A person, except the son of a minister of the gospel, who has not resided at least six months in the county in which he is applying for a scholarship.

10. No applicant shall be debarred from standing the examinations because he has failed to fill out the necessary certificate of financial inability as required by law. However, this certificate must be in the hands of the Registrar of Clemson College before the applicant can be considered eligible for a scholarship. (The blank certificate form can be obtained at any time from the Registrar of Clemson College, or from the County Superintendent of Education on the day of the examinations.) It must reach the Registrar not later than noon of July 12, otherwise the applicant will be eliminated from the competition.

11. If a scholarship vacancy shall occur, and the county to which it belongs has no eligible applicant, the Clemson Faculty may fill the vacancy by awarding the scholarship to some legally eligible applicant from another county. However, any such appointment shall not last longer than the current session.

12. No recommendations for scholarship awards to alternates will be made later than 30 days after the opening of the session.

The one hundred and seventy four-year scholarships provided in this institution by the Legislature are apportioned to the counties of the State according to law as follows:

Abbeville	3	Greenwood	4
Aiken	4	Hampton	2
Allendale	2	Horry	3
Anderson	7	Jasper	2
Bainbridge	3	Kershaw	3
Bartholomew	3	Lancaster	3
Beaufort	3	Laurens	4
Berkeley	3	Lee	3
Calhoun	2	Lexington	4
Charleston	9	Marion	3
Cherokee	3	Marlboro	4
Chester	3	McCormick	2
Chesterfield	3	Newberry	4
Clarendon	4	Oconee	3
Colleton	3	Orangeburg	6
Darlington	4	Pickens	3
Dillon	3	Richland	6
Dorchester	2	Saluda	3
Edgefield	3	Spartanburg	8
Fairfield	3	Sumter	4
Florence	4	Union	3
Georgetown	3	Williamsburg	4
Greenville	4	York	5

Note.—Scholarship students are credited at the beginning of each quarter with one-fourth of the value of the scholarship (\$25.00). See fees and expenses for full information.

TWO-YEAR AGRICULTURAL SCHOLARSHIPS

The holders of these scholarships are required to take the Two-year Agricultural Course described elsewhere in this catalogue.

No financial certificate is required of applicants for these scholarships. The Act defining them is as follows:

"Sec. 1. **Beneficiary Scholarships for Clemson.**—There are hereby established and created fifty-one beneficiary agricultural scholarships in the Clemson Agricultural College of South Carolina, said scholarships to be of the value of one hundred dollars (\$100) per annum, and free tuition, and to be awarded so that there shall be one scholarship to each county, and seven scholarships from the State at large.

"Sec. 2. **To Whom Open—Examinations.**—The said scholarships shall be open to any young man a native of South Carolina, eighteen (18) years old or over, who has spent not less than three (3) years in the active practice of farming, consideration being given to the need and worth of the applicant, and to his agricultural knowledge as shown by suitable examinations. All applicants shall stand such examinations as shall be prescribed by the proper authorities of the Clemson Agricultural College, and these examinations shall be held at the same time and in accordance with the general laws governing the examinations for other scholarship students.

"Sec. 3. **Board of Education to Appoint.**—The faculty of the said Clemson Agricultural College, or committee designated by the Board of Trustees for the purpose, shall recommend to the

State Board of Education for appointment to the scholarships one of the young men who has successfully passed the examination and is otherwise qualified.

"Sec. 4. How Scholarships To Be Paid For—Term of Scholarships.—The said scholarships shall be paid from the income of the said Clemson Agricultural College as now provided by law, and each shall continue for a term not exceeding two years, or for such length of time as the beneficiary shall be able to maintain himself as a student of the college, and the said sum of one hundred dollars (\$100) per annum shall be placed to the credit of each beneficiary and applied to the payment of his board and other necessary expenses.

The Harmon Foundation

The Harmon Foundation of 140 Nassau Street, New York City, has appropriated \$1,000.00 as a loan fund to assist worthy students for the session 1923-24, with the understanding that a similar appropriation will be made for the sessions 1924-25, 1925-26, 1926-27, and 1927-28. Only juniors and seniors, studying in a course leading to a degree, are beneficiaries of this fund, and only those students whose means of support are dependent in whole or in part on their own labor are considered. A maximum loan in any one year is \$250.00.

The students sign installment contracts bearing interest at the rate of six per cent, payable at the rate of not less than ten dollars monthly, payments to begin one year after graduation. Contracts will be discounted at the rate of six per cent of the principal, if principal and interest are repaid within one year after graduation.

To insure the fund against losses, each borrowing student makes his contract for the amount of money borrowed plus a premium of 10%. He thus becomes responsible to this extent for the defaults in the payments of loans made to other students in his own college group receiving loans the same year. The premium is not used to augment the funds of the Foundation, and is not used for administrative expense. If there are losses, the losses will be deducted from the premium collected and the balance of the premium with 6% interest will be returned to the borrowers in proportion to the amount of money loaned and repaid.

If there are no losses in the group-operation the entire premium collected will be returned with interest.

William Wilson Finley Foundation of the Southern Railway.

The sum of \$1,000.00 has been deposited with the College to be used as a loan fund and is available for young men living in counties traversed by the Southern Railway or the Blue Ridge Railway. The following conditions govern the use of this fund:

(a) That no help be extended to a student during his first year in College.

(b) That after he has been in College for one year, and during that time demonstrated not only his need, but his worth in character, studiousness and promise, the President of the College may at any time during the session loan to such needy student a sum not to exceed seventy-five dollars in any one session, provided the beneficiary is pursuing a regular agricultural course (two-year or four-year course), is a resident of a county traversed by the Southern Railway, or the Blue Ridge Railway, and does not hold a scholarship of any kind.

(c) That the student receiving this financial assistance shall give his note bearing 6 per cent. interest, payable one, two, or three years after completion of course. The loans of the first year shall be payable within one year after completion of the course, and any second and third loans shall be payable two and three years respectively after date of normal completion of the course.

At the discretion of the President the student may be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian.

(d) The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees and to the President of the Southern Railway, giving full details as to the use and status of the Fund.

(e) Not more than one-fourth of the Fund shall be loaned in any one fiscal year.

George Cherry Foundation

Mrs. Mary Cherry Doyle of Oconee County has donated the sum of \$1,000.00 to be used as a loan fund to worthy and needy students from Oconee and the part of Anderson County including Pendleton. The purpose of the fund is to commemorate her father, the late George Cherry, whose old home is near the College.

The following conditions govern the use of this fund:

1. That after a student has been in college for one semester, and during that time demonstrated his character, studiousness and promise, as well as his need for help, the President of the College may at any time thereafter during the session, lend to such student a sum not to exceed \$100.00 during any one session; provided, that loans shall be made only to students who are pursuing regular two year or four year courses, and who are residents of Oconee County, or of the territory within a radius of five miles of Pendleton Courthouse, and who do not hold other scholarships of any kind.

2. That the student receiving this financial assistance shall give his note bearing 6 percent. interest, payable one, two or three years after completion of course. The loans of the first year shall be payable within one year after completion of the course, and any second, third and fourth loans shall be payable two, three or four years respectively after date of normal completion of the course.

At the discretion of the President, the student may be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian.

3. The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees, giving full details as to the use and status of the Fund, and this shall be published in the Oconee papers.

4. Not more than one-fifth of the Fund shall be loaned in any one fiscal year.

Conditions Governing The Use of the \$500.00 U. D. C. Fund.

John C. Calhoun Chapter

a. That no help be extended to a student during his first year in college.

b. That after he has been in college for one year, and during that time has demonstrated not only his need, but his worth in character, studiousness and promise, the President of the College may at any time during the session lend to such needy student a sum not to exceed one hundred dollars in any one session, provided the beneficiary is a lineal descendant of a Confederate Veteran, and a member of the Junior or Senior Class.

c. That the student receiving this financial assistance shall give his note bearing 6 per cent interest, payable one or two years after the completion of the course. The loan of the first year shall be payable within one year after the completion of the course, and any second loan shall be payable two years after date of normal completion of the course.

The student obtaining a loan from this fund shall be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian; provided such endorser shall be passed upon by a bank cashier.

d. The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees and to the President of the John C. Calhoun Chapter U. D. C. giving full details as to the use and status of the Fund.

e. Not more than one-fourth of the Fund shall be loaned in any one fiscal year.

PART III.—STUDENT LIFE AND ACTIVITIES

LIVING CONDITIONS

At Clemson all undergraduate students live in barracks under military discipline. The College is located away from the distractions of city life while at the same time it possesses many of its advantages. A student cannot leave the campus without permission. He must at all times be present or accounted for.

The three barracks which house the students are steam heated and electrically lighted from the central power station located

in rear of Barracks No. 2. Each building is provided with ample toilet facilities. In addition to the hot and cold water supplied to each of the barracks, running spring water is pumped to each floor for drinking.

The barracks or dormitories are divided into "halls" for military purposes, a unit being assigned to a hall under the supervision of a cadet officer. At night a cadet guard is maintained to insure order during study hours at which time the students are required to remain in their rooms.

Cadet officers remain on duty in the guard room both day and night. A long distance telephone with twenty-four hour service is located in the guard room.

Each student room is equipped with necessary furniture. The beds are single width. Bed linen, bed covers, pillows and towels must be furnished by the student.

The dining hall or mess hall is located in Barracks No. 1 and is under the supervision of the mess officer. The mess hall is well equipped with silverware, china, glassware, table linen, etc. The kitchen and cold storage plant is one of the very best in the South. All students living in the barracks eat in the mess hall.

RELIGIOUS INFLUENCES

Clemson co-operates to the fullest extent with the various churches and the Y. M. C. A. in the religious training of its students.

Four denominations, Baptist, Episcopal, Methodist, and Presbyterian have erected churches in the community. The college contributes liberally to the salaries of the resident ministers who do pastoral work among the students. All Protestant students are required to attend the Sunday morning services at one of the churches. Services for students of Roman Catholic faith are held frequently by a priest from one of the nearby towns.

Before beginning the day's work the faculty and students assemble in Chapel where brief devotional exercises are held by one of the local ministers. Attendance upon this service is required of all.

Sunday Schools and young peoples church societies are maintained by the local churches. Attendance upon these services is voluntary.

The Young Men's Christian Association is housed in its own building. The "Y" has become the chief social gathering place and is the center of voluntary religious activity. During the current session approximately 600 students have been enrolled in voluntary Bible Study Classes. Two trained secretaries are employed by the Association.

YOUNG MEN'S CHRISTIAN ASSOCIATION

The Young Men's Christian Association has supervision of the voluntary religious activities, of the students and endeavors to serve the religious, social, and physical life of the college community in keeping with the general policies of the International Organization. It is a democratic student society, advised by a board of faculty and business men, and administered by General and Assistant Secretaries who have no official connection with the college as disciplinarians or instructors.

There are ten divisions of its work, as follows: Bible Study, Mission Study, Community Service, Membership, Conference, Social, Religious Meetings, Church and Relationship, and Publicity. Each of these divisions is in charge of a student committee, and the genius of the organization lies in keeping these men active in making the will of Christ effective in the lives of men. The chairman of these several committees constitute the cabinet, which meets weekly for consultation and plans.

In 1922 a type of organization termed the Friendship Council was inaugurated which has for its object the promotion of Christian fellowship in barracks. The past year this organization was composed of more than 60 members. This organization is responsible for the organization of 15 daily Morning Watch or prayer groups in barracks having a daily attendance of around 200 students.

The Y. M. C. A. endeavors to enroll every man in Voluntary Bible Study, Mission Study and the study of Sex Hygiene. During the past year seven hundred men were enrolled in Voluntary Bible Study Classes, almost 200 in Sex Hygiene, and over 200 in Mission Study. These classes are led by students and professors.

The Y. M. C. A. endeavors to see that every man in college learns to swim. Free lessons are given by the Secretaries and the members of the swimming team. Class and company basketball is under the auspices of the Y. M. C. A.

Many speakers of national reputation come to Clemson upon the invitation of the Y. M. C. A. Among the men invited during the past year are: Dr. James I. Vance, Hon. J. Stitt Wilson, Rev. John McSween, Dr. Ashley Chappel, Bishop Finlay and others.

CARE OF THE SICK

The Surgeon is one of the regular officers of the College, and his special duty is to look after the health of the students. He also has charge of the Hospital, and supervises all matters pertaining to the sanitation of barracks.

At a regular appointed time every day, students who so desire may consult the Surgeon, and those who are sick are cared for by experienced nurses in the College Hospital. In case of necessity students are allowed to consult the Surgeon at any time, or send for him, as may be required.

The Surgeon cannot undertake to notify parents every time a student reports to the Hospital for medicine, or for rest on account of some slight complaint. However, they may rest assured that they will be promptly notified of sickness of any consequence. In case of serious illness the Surgeon will telegraph them.

STUDENT PUBLICATIONS

The **Clemson College Chronicle**, a monthly magazine designed to encourage literary work among the students, is published jointly by the literary societies during the college session.

The **Tiger**, published weekly is devoted largely to athletics, Alumni and Local News.

The **Annual**, an illustrated volume, is published under the auspices of the senior class.

LITERARY SOCIETIES

Three literary societies, the Calhoun, the Columbian, the Palmetto, furnish a valuable supplement to the work of the college. These societies afford facilities for practice in debate, oratory, declamation, and essay writing, and their members acquire valuable knowledge of parliamentary law and usage. The meetings are held weekly, on Friday evenings. An annual

On these occasions a representative is chosen from each society to enter the contest for the Trustees' Medal at Commencement. The societies themselves also award medals annually to the best debater, orator, and declaimer.

The societies occupy halls in the Academic Building, which are furnished with carpets and opera chairs and which are maintained entirely by the students. A small initiation fee is charged, and small yearly dues are collected to meet running expenses. All students are advised to join one of these societies.

State Oratorical Contest.—The societies also send a representative to the annual contests of the South Carolina Intercollegiate Oratorical Association, which includes the following institutions: Furman University, Wofford College, Clemson Agricultural College, Presbyterian College of South Carolina, Erskine College, Newberry College, South Carolina Military Academy, and the University of South Carolina.

LYCEUM COURSE

A Lyceum course, comprising about six numbers and employing some of the best talent on the American platform, is offered as a means of entertainment to students and others.

CLEMSON COLLEGE BRANCH OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

This organization is composed of instructors and students belonging to this national institution. This branch is maintained with the aim of acquainting the students with current engineering practice and problems.

STUDENT CHAPTER; AMERICAN SOCIETY OF MECHANICAL ENGINEERS

A local branch of this national society, composed of faculty members and of students pursuing mechanical engineering, is established at the college. Meetings are held periodically for the discussion of the latest engineering practices.

STUDENT CHAPTER: AMERICAN SOCIETY OF CIVIL ENGINEERS

Membership in this is limited to civil engineering students as follows: All seniors in good standing; the seven juniors having the highest class standing; and the one sophomore having the highest class standing.

Regular meetings are held monthly, and at such other times as exigencies favor. At these meetings engineering practice is presented and discussed; speakers from outside the college being obtained as often as practicable.

RESERVE OFFICERS' TRAINING CORPS

Under the provisions of the National Defense Act of June 3rd, 1916, the War Department has established at Clemson College an Infantry unit of the Reserve Officers' Training Corps (R. O. T. C.).

The purpose of the R. O. T. C. is set forth in Special Regulations 44, War Department, 1919, as follows:

1. The Reserve Officers' Training Corps is organized under authority of act of Congress of June 3, 1916, as amended by acts of Congress of September 8, 1916, and July 9, 1918. Extracts from these acts are contained in Appendix I

2. The primary object of the Reserve Officers Training Corps is to provide systematic military training at civil educational institutions for the purpose of qualifying selected students of such institutions as reserve officers in the military forces of the United States. It is intended to attain this object during the time that students are pursuing their general or professional studies with the least practicable interference with their civil careers, by employing methods designed to fit men, physically, mentally and morally, for pursuits of peace as well as pursuits of war. It is believed that such military training will aid greatly in the development of better citizens. It should be the aim of educational institutions to maintain one or more units of the Reserve Officers' Training Corps in order that in time of National emergency there may be instantly available a large number of educated men, physically efficient and trained in the fundamentals of military science and tactics and fitted to lead intelligently the units of the armies upon which the safety of the country will depend. The extent to which this object is accomplished will be the measure of the success of the Reserve Officers' Training Corps.

3. The Reserve Officers' Training Corps will enrich the educational resources of schools and colleges by contributing new problems, applications and equipment. This will not only vitalize the educational resources of schools and colleges by contributing new problems of study but give to the student a training which will be as valuable to him in his industrial or professional career as it would be, should the Nation call upon him to act as a leader in its defensive forces.

Moreover, the wide variety of work recognized and accepted by the War Department as of intrinsic value for military purposes should leave on the mind of the student an indelible impression of the extent to which the modern Army is the nation in arms. Commerce, industry, agriculture and all the professions have each their contribution to make to the military organization.

4. A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Physical training, therefore, will form an essential part of the military instruction. It will be the policy to encourage and support the physical training given by civilian teachers, thus cooperating with all other effective agencies in an effort to promote a more vigorous American manhood.

5. a. The policy adopted by the War Department to carry out the provisions of the act of Congress of June 3, 1916, is a matter of vital importance to every citizen interested in the educational system of our country and the development of American youth. It will aim to give all students of the Reserve Officers' Training Corps a thorough physical training, to inculcate in them a respect for all lawful authority, to teach the fundamentals of the military profession, leadership, and the special knowledge required to enable them to serve efficiently in the various branches of the military service.

b. The War Department aims to establish in selected civil educational institutions a system of training which will tend towards making better citizens and furnish a means whereby the graduates of such institutions can function more advantageously to the best interests of the nation in time of military necessity.

Requirements

All students at the college are required to take a minimum of three hours per week of military training. Members of the Freshman and Sophomore classes who are more than 16 years of age and who pass the physical examination must take the Basic Course as laid down by the War Department, and set forth under the heading "Military Department" in the detailed description of the course.

A Junior and Senior student may continue in the Basic Course or by conforming to the following rules may enter the Advanced Course:

1. He must have completed the Basic Course.
2. He must be recommended by the President of the college and the Professor of Military Science and Tactics.
3. He must agree in writing to continue the course during the remainder of his time in college, devoting not less than five hours per week to the subject, and to attend the one summer camp prescribed by the War Department.

Students taking the Basic Course in their Freshman and Sophomore years are furnished one uniform each year, or commutation at a rate prescribed by the War Department. Members of the upper classes continuing in the Basic Course are not considered members of the R. O. T. C. and are not entitled to the uniform or commutation therefor. Freshmen or sophomores and special or short course students who are not physically qualified for the R. O. T. C. and members of these classes who for other reason do not enter the R. O. T. C. are not entitled to uniforms or commutation thereof.

At present rates the Government commutation for uniforms next session would be \$6.00 for the session for sophomores and seniors and \$30.00 for the session to freshmen and juniors. These figures cannot be guaranteed as they are fixed each session by the War Department.

Those taking the advanced course are entitled to this uniform or commutation therefor and in addition, to an allowance for subsistence, (thirty cents per day at present), during the remainder of their course at college including the vacation between their Junior and Senior years. During the time in camp they are given the ration instead of commutation for subsistence, and at present are paid seventy cents per day.

Summer Camps

As noted above under head of "Requirements," every one taking the advanced course must take, under Army supervision and at Government expense, one period of camp training of about six weeks duration.

Transportation to and from the camps, subsistence while in attendance, and a uniform for camp use will be furnished.

Obligations

The only obligation incurred by the student taking the Basic Course is to take proper care of the uniform issued to him.

No obligations are imposed on those in the Advanced Course except as set forth in the contract and noted above, namely—

(a) To continue in it to completion unless sooner discharged by competent authorities.

(b) To attend one summer camp.

After Graduation—Commission in O. R. C.

After completion of the college course and attending the period of camp training the student is released from any further service under his contract with the United States. But if he so desires, and is recommended by his instructors, he may apply for a commission in the Officers' Reserve Corps (O. R. C.). These commissions are issued for periods of five years. If his application is approved and

the President of the United States will commission him, he may be required to report for instruction for a period not to exceed fifteen days in any one year, at Government expense, and under the salary of his grade. During this period of five years he may be called into active service only in case of actual or threatened hostilities, and then with the rank he holds in the Reserve,—Second Lieutenant or higher.

Appointment as Temporary Second Lieutenant in Regular Army.

Upon application, the President of the United States is authorized to appoint any Reserve Officer as a Temporary Second Lieutenant in the U. S. Army, and assign him to duty with the army for a period of six months. During this service he will receive \$100 per month salary and the allowances of a Second Lieutenant. At the end of the period of instruction he reverts to his status as a Reserve Officer.

ATHLETICS

It is the policy of the College to sanction and encourage athletics so long as it does not interfere with studies and other duties. Football, baseball, basketball, and track are the most popular sports, and it is assumed that parents are willing for their sons to participate in these games unless the President is definitely notified to the contrary. The athletic teams are permitted to take a few trips each season, usually on Saturday, to play intercollegiate games. The college is a member of the Southern Intercollegiate Conference (S. I. C.) and of the South Carolina Intercollegiate Athletic Association (S. C. I. A. A.).

Athletic Council.—The Athletic Associations to which the college belongs have placed the athletic interests at each college under the supervision of an athletic council, consisting of members of the Faculty, the Alumni and the student body.

The Council consists of thirteen members—four student members elected by the student body; three members of the Faculty—two elected by the students and one by the Alumni; four members of the Faculty (one of whom shall be the Director of Student Activities) appointed by the President; and two alumni members appointed by the Alumni Association.

A member of the Faculty, known as the Director of Student Affairs, has the final authority in all lines of student activities in so far as their relation to college rules are concerned.

Intercollegiate Athletics.—For the regulation of intercollegiate athletics, the Faculty has adopted the following rules:

1. No student who has a class mark lower than P in more than eight hours of work in any one term shall be allowed during the ensuing term to take part in any intercollegiate contest. Demerits

shall be considered in the record, and more than forty demerits shall count as a failure in two hours of class work. Changing from one course to another, or from a regular to an irregular course, shall not interfere with the operation of this rule.

At the end of each grading period, the Faculty Athletic Committee will canvass the record of athletes, and if any are found to be so deficient as to endanger their scholastic standing, they will be withdrawn from the squad.

2. Absences from College.—The football team shall be allowed a maximum of ten days absence from the campus during the session for games away from the college. The baseball team shall be allowed a maximum of ten days; the band shall be allowed a maximum of seven days; the track team and the basketball team ten days. The tennis team, glee club, or any other organization hereafter sanctioned, shall be allowed a maximum of six days absence during each session. Saturday afternoon, Sunday, and holidays shall not count as days. No one contestant or representative shall be allowed to leave the campus for more than twenty days during the session, except at the discretion of the Faculty Athletic Committee.

3. No member of an athletic team shall be eligible for a managerial position in any other branch of sport.

4. No team shall be allowed to leave the college grounds to participate in any match games unless accompanied by a member of the Faculty, who shall be responsible to the Faculty for the conduct of the players and coaches while away from the college. Such representative shall be appointed by the chairman of the Faculty Athletic Committee, and his expenses shall be included in the expenses of the trip, provided that when any team, except the football team, leaves the college grounds, the chairman, at his discretion, may appoint a player or a manager in place of a member of the Faculty.

5. No student shall be eligible to participate in an intercollegiate contest who is away from the college without proper authority, or without having complied with all the rules or orders issued by the Commandant regarding such matters.

6. It shall be the duty of the Faculty Athletic Committee to see that the foregoing rules and regulations are strictly enforced.

CADET EXCHANGE

The college maintains a book and supply store known as the Cadet Exchange where students may purchase text-books, drawing instruments and other student supplies at reduced prices. A complete list of the text-books used in each course with the prices of same will be furnished on application.

PART IV.—ORGANIZATION AND GOVERNMENT

ORGANIZATION OF THE COLLEGE

By Departments and Divisions

- | | |
|---|---|
| <p>1. Agricultural Department</p> <p style="margin-left: 20px;">Agronomy
Geology and Mineralogy
Horticulture
Veterinary Science
Zoology and Entomology
Dairying
Animal Husbandry
Botany and Bacteriology
Rural Sociology
Education.</p> <p>2. Engineering Department</p> <p style="margin-left: 20px;">Mechanical Engineering
Electrical Engineering
Civil Engineering
Architecture and Drawing
Forge and Foundry
Machine Shop
Wood Shop</p> <p>3. Chemical Department</p> <p style="margin-left: 20px;">Chemistry
Chemical Analysis (Public State Work)</p> <p>4. Textile Department</p> <p style="margin-left: 20px;">Textile Chemistry and Dyeing
Weaving and Designing
Industrial Education
Carding and Spinning</p> <p>5. Academic Department</p> <p style="margin-left: 20px;">English
History
Mathematics
Physics
Economics and Sociology</p> | <p>{ Teaching
{ Research
{ Extension</p> <p>6. Military Department</p> <p style="margin-left: 20px;">Military Instruction
Military Discipline</p> <p>7. Student Affairs</p> <p style="margin-left: 20px;">Cadet Funds
Student Activities</p> <p>8. Miscellaneous</p> <p style="margin-left: 20px;">President's Office
Treasurer's Office
Library
Roads and Campus
Heat, Light, and Water
Construction and Repair</p> |
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COLLEGE ORGANIZATION AND GOVERNMENT

Board of Trustees. The government of the college is vested in a Board of thirteen members, six of whom are elected by the Legislature and seven life and self-perpetuating under the Clemson will. The function of this Board is legislative and not executive. The

Board determines the general policy of the college, makes the laws for its government, and directs the expenditure of its funds.

The **President** is the chief executive and administrative officer of the Board of Trustees. He is the head of the college and is responsible for its satisfactory working and success.

The **College** is divided into seven departments, namely, **Agricultural**, **Engineering**, **Chemical**, **Academic**, **Textile**, **Military**, and **Student Affairs**. A Director is at the head of each department and is responsible to the President for its conduct and success. The departments comprise the various divisions indicated on the preceding page. Each division is in charge of a professor who acts as chief of the division. The President conducts all official business with each department through its Director.

The **Faculty** consists of all officers of instruction in the college. The voting members are the Directors, Professors, Associate Professors, and Assistant Professors.

The faculty meets at least once a month, or whenever called by the President, and is an advisory body to the President, on the instructional work of the college and on such other business as he may bring before it.

Faculty Committees. In order to aid him in his executive duties and to carry on the instructional work of the college, the President appoints committees from the Faculty. To these are assigned certain specified lines of work and the committees are clothed with full authority.

Student Activities.—The Department of Student Affairs embraces all those interests supported by the cadets, and all student activities except the Y. M. C. A. It is the aim of the college to assist in every possible way in making these interests helpful to the student body as a whole. The Director of Student Affairs is in charge of all such activities.

The Discipline Committee.—The Discipline Committee is composed of six directors of departments and two full professors elected annually by the Board of Trustees. This committee constitutes the court of the college and tries cadets charged with serious offences under the regulations. The President is the reviewing authority of the Discipline Committee, and may at his discretion set aside or modify the sentences imposed. A parent, or a cadet over age, has the right to appeal from the sentence of the Discipline Committee to the Board of Trustees, provided the appeal is lodged with the President of the College within thirty days. This appeal must be forwarded to the President of the Board of Trustees, who if he deems the appeal meritorious, shall present it at the next regular or called meeting of the Board.

All trials by the Discipline Committee are open to the public, and all testimony is taken under oath and recorded stenographically as in a civil court. A student on trial may have some member of the faculty to assist him in his defense if he so desires.

CADET MILITARY ORGANIZATION AND GOVERNMENT

Clemson College is operated as a military school,—not for the purpose of making soldiers, but in order that the students may learn important life-lessons of obedience to authority, punctuality, system, courtesy and loyalty. The military system insures proper exercise and physical development, guarantees to the parent that the student shall at all times be present at the college, or away by proper authority, insures attendance upon classes and other duties, and insures proper provision for study as well as for recreation.

The military system places every student on the same basis. All students must dress alike, eat at the same table, live under the same conditions, and be subject to the same privileges and the same restraints. No distinction whatever is made because of wealth or social position or any other such consideration. The only distinguished men in a cadet corps are those who achieve the distinction by being able to do some one thing better than their fellow students.

The military system does not in any way interfere with the regular college work, and on the other hand enables this to be carried on at the highest efficiency. It is the military training more than any other single feature that gives to Clemson's graduates an advantage which is an important factor in their future progress and success.

The President.—The President of the College shall have the general command and government of the Institution, watching over its administration, discipline and instruction. He shall have authority to make rules, from time to time, governing the granting of permits and furloughs to cadets; to inspect anything in a cadet's room or personal baggage; to suspend or modify these regulations, or to publish special regulations when he considers it necessary, which shall have the authority of the Board of Trustees until they shall act on the same. He shall prescribe the hours of study, drill and recreation.

Commandant.—The Commandant of Cadets, under the President, has supervision of the Corps of Cadets in all that pertains to its organization, drill, military police, discipline and administration. He shall prescribe the order in which the furniture, bedding, books, clothing, equipment, etc., shall be arranged throughout the barracks and shall make a thorough inspection of the rooms, furniture, arms, equipment and uniforms of the cadets at least once each week. He shall have the right to inspect anything in a cadet's room or personal baggage. He shall perform such other duties as are prescribed in these regulations. He shall have the rank of Colonel.

Assistant Commandants.—The Assistant Commandants shall perform such duties as may be prescribed for them by the President or Commandant.

Military Instruction.—All students, excepting Post Graduates, must take a minimum of three hours military instruction per week. All who pass the required physical examination must take the Basic Course prescribed by the War Department for the R. O. T. C. during their Freshman and Sophomore years.

Members of the Junior and Senior classes are selected by the Professor of Military Science and Tactics, subject to the approval of the President, to take the Advanced Course prescribed for the R. O. T. C., receiving certain financial benefits allowed by the Federal Government.

Cadet Officers And Non-commissioned Officers.—The Cadet Officers and Non-commissioned Officers are appointed by the Commandant, subject to the approval of the President. When practicable they shall be appointed from members of the R. O. T. C. who have been most studious and soldier-like in the performance of their duties, and most exemplary in their conduct. No cadet may decline any office to which he may be appointed.

As a rule the Officers shall be appointed from the Senior class, the Non-commissioned Officers except Corporals from the Junior class, and the Corporals from the Sophomore class.

Study Hours.—Study hours are those parts of the day which are designated for study and shall be prescribed in orders.

Chapel and Church.—All students are required to attend Chapel Services, except on Saturday and Sunday. All students except Catholics and Jews are required to attend Divine Services at one of the local churches on Sunday mornings.

Furloughs and Passes.—Any cadet who has been granted a furlough or pass and who stays over the time stipulated unless for sickness or other good and valid reasons acceptable to the Commandant, will lose his place in the college, and will be required to file a new application for admission, and pay a fee of \$5.00 before being allowed to rematriculate. In case he has been sick a certificate from the attending physician must be submitted, and no such certificates will be accepted unless the President or Commandant has been notified in advance of the date the cadet is due to return.

The Commandant may, at his discretion, in lieu of rematriculation and payment of fee, punish the cadet by arrest, extras etc., according to the nature of his offense, the punishment not to exceed one month's arrest, 20 demerits and 20 extras. All cadets returning late on furlough or pass are placed in room arrest pending an investigation of the reason for their late return.

All communications from parents requesting furloughs for their sons must be addressed or sent directly to "The Commandant" or to "The President," and must set forth fully the reason for the

request. No furloughs will be granted unless the reasons given are considered satisfactory and sufficient justification for any loss of time for absence from classes or other duties. Telegrams which do not explain fully will not be accepted as complying with the above rules. In any case in which business is given as a reason the nature of the business must be explained fully.

A parent has the right to demand a discharge from college at any time and for any reason but the college authorities reserve the right to grant or refuse to grant furloughs.

Week End Leaves.—Week end leaves will be granted only to cadets who have attained to a prescribed standard in discipline.

Hazing.—Hazing is positively forbidden. Any cadet proven guilty of hazing in any form whatever will be dismissed from the college. Every cadet entering college will be required to sign a pledge agreeing to certain conditions in this connection.

Demerits.—Demerits are awarded for every unremoved report, the number depending on the nature and degree of the offense. Any cadet receiving eight-five demerits during any one semester or a total of one hundred and fifty demerits during the session shall be required to withdraw from college.

Discharge.—No cadet unless twenty-one years of age and paying his own way at college shall be discharged except on the written application of his parents or guardian addressed to the President or the Commandant, or for reasons satisfactory to the President.

Failure to Pay Dues.—The President may require a cadet to withdraw from college if after due and reasonable notice his dues to the college are not paid.

Text Books.—Each student will be required to own his own text books and necessary equipment, except in the case of brothers in the same class who occupy the same room.

All cadets shall submit their text books and other equipment for inspection at such times as are ordered.

Day Cadets.—All cadets shall live in the barracks, except those who live with their parents or relatives near enough to attend from their homes. Those so living at home shall be known as "Day Cadets." All will be required to live in the barracks at least six months of the freshman or sophomore year as may be directed by the President. No cadet will be given a Bachelor's Degree unless he shall have lived at least two-thirds of one session in barracks. Day cadets are subject to the Cadet Regulations.

Motor Vehicles.—No cadet or day cadet shall own or operate as his own any automobile or motorcycle during the regular session of the college.

PART V.—REQUIREMENTS FOR DEGREES— COURSES OF STUDY

FACULTY RULES

Grades and Examinations:

1. The semester hour shall be the basis of all credits. One recitation hour or two laboratory or shop hours a week for one semester shall constitute a semester hour.

2. The standing of a student in his work at the end of a semester shall be based on daily class work, regularity of attendance, tests or other work, and the final examinations.

3. Written examinations shall be required in all subjects at the end of each semester, except in certain laboratory or practical courses where not deemed necessary by the departmental faculty. A student who has been absent from more than one-fourth of the total number of class periods in any subject for a semester is debarred from the final examination.

4. A semester grade once reported to the Registrar shall be the final grade for the period covered.

5. Separate grades shall be given on theoretical and practical work except where in the judgment of the departmental faculty separate grades are not practical.

6. No semester grade shall be given out until the close of the examination period for that class.

7. When an instructor completes a subject he may hold an examination on it before beginning the next subject, provided such examination does not conflict with the regularly scheduled work.

8. The grading system shall be as follows—

A—Excellent. Indicates that the student is doing work of a very high character. The highest grade given.

B—Good. Indicates work that is satisfactory, though not of the highest order.

C—Fair. Indicates work of average or medium character.

D—Pass. Indicates work below the average and unsatisfactory. The lowest passing grade. For graduation a student must have a grade above D on 50 percent of his total credit hours.

E—Conditioned. Indicates a failure to satisfy the requirements as to daily recitations, tests or other work, as well as to the final examination, which condition in the opinion of the instructor may be made up by reexamination at some fixed time.

F—Failed. Indicates that a student knows so little of the subject that it must be repeated in order that full credit may be received.

I—Incomplete work. Indicates an absence from examination on account of sickness or other satisfactory reason, or that a relatively small part of the semester's work remains undone. A grade I is not to be given a student who has made a grade F on his daily work.

9. Absences from Class or Examination. Removal of Grade I:

A student who has been absent from more than one-fourth of the total class periods in a subject during a semester may be dropped from the class. Such a student who is permitted to continue in class shall not stand the final examination until the work missed has been made up.

All work missed on account of absences for good and sufficient reasons shall be made up to the satisfaction of the instructor within thirty days after the student returns to classes.

All incomplete grades (I's) not removed before the first class day of the first semester shall become failures, (F's) and must be taken over as such.

A student who for reasons satisfactory to the faculty is absent from any of the first semester examinations, will be allowed to make up these examinations during the second semester at the convenience of the instructor or during the reexamination period just before Commencement. A student who is absent from any of the second semester examinations shall stand them during the make-up period in September. A student who is absent from an examination without excuse is graded E.

10. Removal of Conditions:

Only one opportunity shall be given a student to remove a condition (E) by a reexamination. A student who fails to pass such a re-examination shall be required to repeat the subject hour for hour in class. Not more than twelve credit hours of conditions for a session shall be removed by reexamination. A student shall not receive a grade higher than D when a deficiency is removed by reexamination.

First semester reexaminations shall be held just before Commencement in June, and second semester reexamination just before the opening of college in the fall. All conditions (E's) not removed before the first class day of the first semester shall become failures and be repeated as such. Seniors may remove conditions during the week preceding Commencement.

11. Removal of Failures:

A student who has failed (made a grade F) in a subject cannot receive credit for that subject until it has been repeated hour for

hour in class, except that in the case of correlated laboratory work, the number of hours to be taken shall be determined by the instructor. Where separate grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs.

12. Withdrawals on Account of Unsatisfactory Work:

A student who at the end of the first semester has failed, (made a grade F) on 9 or more credit hours of work shall be required to withdraw from college. A student who at the end of the session has failed (made a grade F)) on 18 or more credit hours of work shall not be permitted to return the following session. (Should the application of this rule at the end of the first semester not be to the best interest of an individual student, he may be permitted to continue on probation and schedule a fewer number of hours. Such a student carrying less than a normal schedule must pass on all his work at the end of the next semester or be required to withdraw.)

Any student whose record is generally unsatisfactory at the end of a semester may be dropped from the college, provided the student and his parent or guardian were warned at mid-semester of this probable action.

13. Amount of Class Work Permitted and Required. Prerequisites:

The normal amount of work a student is expected to schedule shall be the number of credit hours listed in the curriculum which he is pursuing. A student shall not be permitted to schedule extra subjects or take over in addition to his normal schedule any work unless he has made during the preceding semester a grade of B or above on at least 50 percent of the total scheduled credit hours. Not more than five clock hours of work may be scheduled in addition to the number of credit hours prescribed in the curriculum.

A continuation subject in the next higher class shall not be scheduled until credit has been received for its prerequisites.

14. Dropping Class Work:

Upon the recommendation of the instructor concerned and approval of the Director, a student may be required to drop a subject because of neglect, excessive absences, or lack of application or preparation. A student required to drop a subject shall be placed on probation for the remainder of the semester, and his parent or guardian shall be notified.

A student who at the end of a semester makes a grade F on 6 but not more than 8 credit hours of work or who makes a

grade E on 10 or more credit hours of work, shall be required to drop from his schedule at least one theoretical subject. (See Rule 12.)

15. Time of Scheduling Work:

All students shall register for classes during the first two days of the semester. No subject may be added or scheduled by a student after the sixth class day of a semester.

16. Deficiencies in Year Courses:

A student who is conditioned (makes a grade E) on the first and second semester's work of a subject continuing throughout the session, shall be required to repeat the subject in class at the next recurrence.

17. How to Raise a Grade E:

A grade E may be removed as prescribed in Section 11. However, if a student makes a grade E in a subject which continues beyond the first semester and to the end of the second semester, the instructor may at the end of the session recommend that the grade be raised to a D, provided the grade made on the work of the second semester is A or B. In such a case the recommendation of the instructor shall be made a special report, must be approved by the Director of the department, and must accompany the grades of the second semester.

18. Promotion to the Senior Class:

A student shall not be permitted to enroll in the Senior Class until all the work of the Freshman and Sophomore Classes has been completed.

19. Requirements for Graduation:

For graduation a student must have completed as many credit hours as are required in his course with a grade above D on 50 percent of the total credit hours. All work must be completed before 5 P. M. on the Saturday preceding Commencement.

Residence of at least one regular session shall be required for graduation.

20. Seniors Failing to Graduate:

A Senior who fails to graduate because of either one E or one F on any subject shall have an opportunity of removing it by examination during the make-up period in September, provided the cadet can furnish evidence of having done satisfactory study. Failing to do this he shall take the subject over with the next class. In either case, the degree will not be awarded until the following Commencement.

21. Change in Course:

A change in course for freshmen and sophomores may be made during the first thirty days of the session.

22. Honors and Medals:

The names of all cadets who at the end of each semester have no failures, no work to make up, and not more than 30 demerits, shall be published and a notice sent to their parents.

23. The Norris Medal:

The Norris Medal shall be awarded to that graduate who shall deserve the same because of meritorious conduct and scholarship. His scholarship shall be determined by the average semester marks for the last three years of his college course.

24. Miscellaneous:

Each student shall be required to own his individual text books and the necessary equipment, except in the case of brothers in the same class who room together.

All requests from the students to the faculty must be made in writing.

MEDALS AND HONORS

Honorable Mention.—Students who at the end of a semester have no failures, no work to make up, and not over thirty demerits will have their names publicly announced, printed in "The Tiger," and notification sent to their parents.

Trustees' Medal.—The Board of Trustees has established a gold medal, to be awarded annually to the best speaker among the representatives of the literary societies at Commencement. These representatives are chosen by judges selected by the societies at the annual public exercises in Memorial Hall. The medal is awarded by judges selected by the Faculty. (The medal was won in 1925 by Cadet J. C. Bagwell of Anderson County.)

Norris Medal. The following is from the will of Hon. D. K. Norris, a life trustee of Clemson, who died in 1905:

"I give \$500 face value, Norris Cotton Mill stock, to the Trustees of Clemson Agricultural College of South Carolina, on condition the dividend thereon shall be applied annually to the purchase of a gold medal, to be known as the 'Norris Medal,' to be awarded to the student of Clemson meriting the same at graduation, under such rules and conditions as may be perscribed by the said Board of Trustees, and which medal shall have engraved on it 'Honos habet onus' (Honor brings responsibility)."

In 1925 the medal was awarded to L. G. Causey of Horry County.

R. W. Simpson Medal. A medal designated as the "R. W. Simpson Medal" is awarded annually to the best drilled cadet in the freshman, sophomore, or junior class. In 1925 the medal was awarded to J. T. Mayfield of Denmark.

Literary Society Medals.—It is customary for the several literary societies to hold annual contests during the session. Gold medals are usually awarded to the best debaters, orators and declaimers.

The Chronicle Medals.—The Chronicle, the monthly magazine published by the literary societies, also usually awards three gold medals, for the best story, the best poem, and the best essay contributed by students during the year.

Farmers' Certificates of Merit.—Beginning with the session of 1914-1915 certificates of merit have been awarded each session to two farmers in South Carolina who have rendered distinguished services in the agricultural development of the state.

In 1925 the certificates were awarded to Mr. C. B. Woolsey, Aiken, S. C., and Mr. Fred H. Young, Timmonsville, S. C.

DEGREES, DIPLOMAS, AND CERTIFICATES

The degree of **Bachelor of Science** is awarded to those students who satisfactorily complete one of the four-year curricula. The course completed is specified on each diploma.

All work for a degree must be completed by 5 P. M. on the Saturday preceeding commencement. Residence of at least one regular session is required for graduation. Diplomas are delivered to the candidates on Commencement Day.

Every candidate for a degree must pay to the Treasurer of the College prior to graduation the cost of the diploma.

The degree of **Master of Science** is for the present offered to candidates majoring in Education. To enroll for graduate work the student must be a graduate of an approved college or university.

Certificates.—Students who satisfactorily complete one of the two year short courses are given certificates.

COURSES OF STUDY

The College offers the following courses of study:

AGRICULTURE

- (a) Four-year courses in Agriculture with major work in Agronomy, Animal Husbandry, Chemistry, Dairying, Education, Entomology and Horticulture.
- (b) Two-Year Course in Agriculture.

CHEMISTRY

- (a) Four-year course in Chemistry.

ENGINEERING

- (a) Four-year course in Architecture.
- (b) Four-year course in Civil Engineering.
- (c) Four-year course in Electrical Engineering.
- (d) Four-year course in Mechanical Engineering.

TEXTILE

- (a) Four-year course in Textile Engineering.
- (b) Four-year course in Industrial Education.
- (c) Two-year course in Textile Industry.

ACADEMIC COURSE

- (a) Four-year General Course
- (b) Pre-Medical Course.

SUMMER SCHOOL

Short courses are offered during the months of June and July to teachers, cotton graders, agricultural club boys, and college students with work to make-up.

(EXPLANATION—In the curricula which follow the first column of figures represent the number of semester hours of credit assigned to each subject, The two figures in parentheses are the actual number of hours per week spent in class and laboratory respectively.

All students who are candidates for the Bachelor's Degrees are required to take military drill three hours per week. In the junior year the R. O. T. C. students take in addition two hours of class work in Military Science, while the non-R. O. T. C. take Business Law the first semester and Meteorology the second semester.

(The R. O. T. C. seniors take also the two hours of Military Science and the non-R. O. T. C. take Psychology.

I—AGRICULTURE

The course in Agriculture, supplemented by work in Mathematics, English, Political Economy, Rural Sociology, History, and the Natural Sciences, allows no differentiation during the first and second years. Its object is to give the student a broad, general knowledge of the subject so that he will have a sound foundation for specialization during his Junior and Senior years. At the end of the Sophomore year it is expected that he will be able to choose intelligently which line of agricultural work he desires to follow.

In the Junior year a student is given the choice of four general branches of Agriculture. He may select one of the following groups: Animal Industry, Plant Industry, Agricultural Chemistry, and Agricultural Education. At the beginning of the Senior year, the student who as a Junior selected the Animal Industry group will major either in Animal Husbandry or in Dairying. The student who as a Junior selected Plant Industry, will major in either Agronomy, Horticulture, or Entomology. The student who selected Chemistry will continue his chemical work, and the student who selected Agricultural Education will continue the study of this subject. A major course requires six hours per week of recitations, and six hours per week of laboratory each semester. In addition to the major work during the Senior year, a sufficient number of elective courses must be selected to bring the number of semester credit hours up to 18. A minimum of 18 semester credit hours is required. No student can elect over 20 semester credit hours without special permission of the faculty. In calculating semester credit hours, two hours of laboratory count as one hour of theoretical.

COURSE I.—AGRICULTURE**FRESHMAN YEAR****First Semester**

Mathematics 1	3	(3,0)
English 1	3	(3,0)
History 1	3	(3,0)
Chemistry 1	5	(4,2)
Field Crops. Agron. 1	4	(3,2)
Drawing 1 and Shop 5	2	(0,4)
Military Science 1	1.5	(0,3)

21.5

Second Semester

Mathematics 2	3	(3,0)
English 2	3	(3,0)
History 2	3	(3,0)
Chemistry 2	4	(3,2)
Animal Husbandry 2	4	(3,2)
Drawing 8 and Shop 6	2	(0,4)
Military Science 2	1.5	(0,3)

20.5

SOPHOMORE YEAR

English 3	3	(3,0)
Physics 3	3	(2,2)
Geology 1	3	(3,0)
Botany 3	4	(2,4)
*Animal Husbandry 2	4	(3,2)
Military Science 3	1.5	(0,3)

18.5

English 4	3	(3,0)
Physics 4	3	(2,2)
Geology 2	1	(0,2)
Botany 4	3	(2,2)
Zoology 2	4	(2,4)
Farm Machy.—Agron. 2	4	(3,2)
Military Science 4	1.5	(0,3)

19.5

JUNIOR YEAR

English 5	2	(2,0)
Agric. Chemistry 13	2	(2,0)
Bacteriology 1	4	(2,4)
F. Management—Agron. 3	3	(2,2)
Horticulture 1	3	(2,2)
Military Science 5	3.5	(2,3)
Electives	3	

20.5

English 6	2	(2,0)
Agric. Chemistry 14	2	(2,0)
Dairy Husbandry 2	3	(2,2)
Soils—Agron. 4	4	(3,2)
Horticulture 2	2	(1,2)
Military Science 6	3.5	(2,3)
Electives	4	

20.5

Junior Elective Subjects.

(Choose one group)

Group A—Animal Industry

Prin. Feeding—Ani. Husb. 3	3	(2,2)
Veterinary Science 2	3	(2,2)
Judging—Dairy H. 4.	1	(0,2)
Animal Husbandry 8a	1	(0,2)

Group B—Plant Industry

Entomology 3	3	(2,2)
Plant Phys.—Botany 6	4	(2,4)
†Farm Motors 19	3	(2,2)
oEntomology 4	3	(2,2)

Group C—Chemistry

Organic Chemistry 5	2	(2,2)
Organic Chemistry 6	3	(2,2)
Quant. Analysis—Chem. 3a	1	(0,2)
Quant. Analysis—Chem. 4	1	(0,2)

Group D—Education.

Agric. Education Ed. 1	3	(1,4)
Agric. Education 2	3	(2,2)

*After 1926-27 given only in Freshman year. †Elective for those intending to elect Agronomy. o Elective for those intending to elect Entomology.

SENIOR YEAR

At the beginning of the senior year the student is required to select one of the following major groups and in addition a sufficient number of electives to make not less than 18 or more than 20 semester credit hours for each semester. These electives may be chosen from the courses given by other divisions of the college when approved by the Head of the Division in which the major is being taken and the Director of the Department.

The student must schedule during the first semester either Political Economy 1, or Rural Sociology 1, as one of the electives.

Agronomy Major—1

First Semester

Second Semester

Genetics—Agron. 5	3	(2,2)	Plant Breed.—Agron. 6	3	(2,2)
Crops—Agron. 9	3	(2,2)	Crops—Agron. 10	3	(2,2)
Forage Crops—Agron. 7	3	(2,2)	Fertilizers—Agron. 12	3	(2,2)
Military Drill 7	1.5	(0,3)	Military Drill 8	1.5	(0,3)

Animal Husbandry Major—2

Feeds—Ani. Husb. 5	3	(2,2)	Poultry Production—A. H. 6	3	(2,2)
Animal Production—A. H. 7	3	(2,2)	Pork & Sheep Production—A.H. 8	3	(2,2)
Judging—Ani. Husb. 9			Breeding—Ani. Husb. 4	3	(2,2)
Military Drill 7	1.5	(0,3)	Military Drill 8	1.5	(0,3)

Chemistry Major—3

Colloid Chemistry 19	2	(2,0)	Colloid Chemistry 20	2	(2,0)
Hist. of Chemistry 17	2	(2,0)	Stoichiometry—Chem. 18	2	(2,0)
Inorg. Chemistry 21	2	(2,0)	Inorg. Chemistry 22	2	(2,0)
Tech. Analysis—Chem. 23	3	(0,6)	Thesis Chem. 24	3	(0,6)
Military Drill 7	1.5	(0,3)	Military Drill 8	1.5	(0,3)

Dairy Husbandry Major—4**First Semester**

Dairy Mfg.—Dairy Husb. 5	3	(2,2)
Creamery Org.—D. Husb. 7	3	(3,0)
Feeds—Dairy Husb. 9	3	(2,2)
Military Drill 7	1.5	(0,3)

Second Semester

Dairy Mfg.—Dairy Husb. 6	4	(2,4)
Dairy Farm.—Dairy Husb 12	3	(2,2)
Breeding—Dairy Husb. 10	2	(1,2)
Military Drill 8	1.5	(0,3)

Education Major—5

Agricultural Education 3	4	(2,4)
Military Drill 7	1.5	(0,3)

Agricultural Education 4	5	(0,10)
Agricultural Education 6	3	(3,0)
Military Drill	1.5	(0,3)

Entomology Major—6

Econ. Entomol.—Ent. 5	3	(2,2)
Insect Morphology—Ent. 9	3	(2,2)
Ani. Parasitology—Ent. 11	3	(2,2)
Military Drill 7	1.5	(0,3)

Econ. Entomol.—Ent. 6	3	(2,2)
Systematic Entomology—Ent. 12	3	(1,4)
Peekeeping—Ent. 10	3	(2,2)
Military Drill 8	1.5	(0,3)

Horticulture Major—7

Pomology—Hort. 3	3	(2,2)
Plant Propagating—Hort. 9	3	(2,2)
Olericulture—Hort. 7	3	(2,2)
Military Drill 7	1.5	(0,3)

Pomology—Hort. 4	3	(2,2)
Olericulture—Hort. 8	3	(2,2)
Landscape G.—Hort. 6	3	(2,2)
Military Drill 8	1.5	(0,3)

II.—ARCHITECTURE

Architecture, always ranked as a fine art, is the oldest of the constructive sciences. It deals principally with the design of buildings, their sites and presentation, their construction, decoration and equipment. It is more circumscribed by utilitarian and technical conditions than any other of the fine arts, and in order to be successful it must be both practical and artistic.

Architectural design is the principal subject and much time is given to it. In this subject students in the drafting room, work out designs for buildings ranging from small structures to large public buildings and groups of buildings. Occasionally, a "sketch" problem, which has to be completed the same day, is given, but usually the problems require from three to six weeks for their completion. Individual criticism is given by the instructor during the progress of the problem and upon completion the drawings are hung up, criticized, judged and graded by members of the faculty. Thus, each student may profit by the experiences of others. The aim throughout this course is to develop imagination, creative power, ability to work out the organism of a building and skill in the clear and artistic presentation of the drawings.

History of architecture is also of great importance in this connection, for the architect must know the experiences and inspirations of the past, its successes and failures, that he may better live, think and build in terms of the present. The courses in freehand drawing and historic ornament are given not only for training in draftsmanship, but for creating effective work.

Strong courses in the constructional or engineering side of the profession, such as mathematics, mechanics, building construction, structural or working drawings and specifications, are given.

Students pursuing this course are advised to spend one or more summers in the routine work of an architect's office, as those who have had this experience advance faster in their work. A two year course will be offered for mature men who have had extended experience in architects' offices.

COURSE II.—ARCHITECTURE**FRESHMAN YEAR****First Semester**

Mathematics 3	5	(5,0)
English 1	3	(3,0)
Physics 1	3	(2,2)
History 1	3	(3,0)
Drawing 3, 11	2	(0,4)
Shops 3, 19	2	(0,4)
Military Science 1	1.5	(0,3)

 19.5
Second Semester

Mathematics 4	5	(5,0)
English 2	3	(3,0)
Physics 2	3	(2,2)
History 2	3	(3,0)
Drawing—Arch. 2,	2	(0,4)
Elements of Arch.—Arch. 4, 6	3	(0,6)
Military Science 2	1.5	(0,3)

 20.5
SOPHOMORE YEAR

Analytics—Math. 5	4	(4,0)
English 3	3	(3,0)
Hist. of Arch.—Arch. 7	3	(3,0)
Design—Arch. 11	7	(0,14)
Cast Draw.—Arch 9	1.5	(0,3)
Military Science 3	1.5	(0,3)

 20

Calculus—Math. 6	4	(4,0)
English 4	3	(3,0)
Hist. of Arch.—Arch. 8	3	(3,0)
Design—Arch. 12	7	(0,14)
Cast Draw.—Arch 10	1.5	(0,3)
Military Science 4	1.5	(0,3)

 20
JUNIOR YEAR

English 5	2	(2,0)
Calculus—Math. 7	3	(3,0)
Mechanics—M. E. 3	3	(3,0)
Bldg. Construction—Arch. 17.....	4	(3,2)
Design—Arch. 15	5	(0,10)
Cast Draw.—Arch. 13	1	(0,2)
Military Science 5	3.5	(2,3)

 21.5

English 6	2	(2,0)
Graphic Statics—C. E. 10	3	(3,0)
Str. Materials—C. E. 8	3	(3,0)
Bldg. Construction—Arch. 18.....	4	(3,2)
Design—Arch. 16	5	(0,10)
Cast Draw.—Arch. 14	1	(0,2)
Military Science 6	3.5	(2,3)

 21.5
SENIOR YEAR

Economics—Econ. 1	2	(2,0)
Bldg. Construc.—Arch. 23	5	(5,0)
Heat and Sani.—Arch. 25	2	(2,0)
Design—Arch. 19.	5.5	(0,11)
Struct. Design—Arch. 21	3	(0,6)
Military Science 7	3.5	(2,3)

 21

Sociology—Econ. 2	2	(2,0)
Bldg. Construc.—Arch. 24	5	(5,0)
Heat and Sani.—Arch. 26	2	(2,0)
Design—Arch. 20	5.5	(0,11)
Struct. Design—Arch. 22	3	(0,6)
Military Science 8	3.5	(2,3)

 21

III.—CHEMISTRY

This course is intended to prepare the student to engage in manufacturing operations involving a knowledge of chemistry, or for employment as chemist in commercial, or fertilizer inspection, or food and feeding-stuff inspection laboratories, and for experiment station or U. S. Government service. A student who has satisfactorily completed this course will also be well equipped to teach elementary chemistry, and to pursue advanced work in chemistry.

The course is fixed for the first two years, freshman and sophomore, and for the first semester of the junior year. Elections are allowed to make up the required 21.5 credits hours, in the second semester of the junior year, and in both semesters of the senior year, which give the student an opportunity to pursue the subject in the direction of chemical engineering, organic and physical chemistry, analytical and sanitary chemistry. The great advances in all branches of chemistry have made some specialization necessary, whether the student expects after graduation to enter any one of the various lines of work open to one who has had a thorough course in chemistry, or to pursue post graduate work. The opportunity for specialization in this course should be both attractive and profitable, whether the student expects to be a chemist, or desires to use his training and knowledge of chemistry in any of the many lines of work in which such training and knowledge are highly desirable, if not, indeed, indispensable.

In this course the student is well grounded in English, German, mathematics, physics mineralogy, and biology, as well as in general, organic, physical, and analytical chemistry, and is besides given an opportunity to specialize as above indicated.

COURSE III.—CHEMISTRY.**FRESHMAN YEAR****First Semester**

Mathematics 3	5 (5,0)
English 1	3 (3,0)
History 1	3 (3,0)
Chemistry 1a	5 (3,4)
Biology 1	3 (2,2)
Drawing 1	1 (0,2)
Mil. Science 1	1.5 (0,3)

21.5

Second Semester

Mathematics 4	5 (5,0)
English 2	3 (3,0)
History 2	3 (3,0)
Chemistry 2a	5 (3,4)
Biology 2	3 (2,2)
Drawing 8	1 (0,2)
Mil. Science 2	1.5 (0,3)

21.5

SOPHOMORE YEAR

Anal. Math. 5	4 (4,0)
English 3	3 (3,0)
Organic Chem. 5	3 (2,2)
Qual. Anal. 3	5 (0,10)
German 1	2 (2,0)
Physics 3	3 (2,2)
Mil. Science 3	1.5 (0,3)

21.5

Calculus 6	4 (4,0)
English 4	3 (3,0)
Organic Chem. 6	3 (2,2)
Quant. Anal. 4	5 (0,10)
German 2	2 (2,0)
Physics 4	3 (2,2)
Mil. Science 4	1.5 (0,3)

21.5

JUNIOR YEAR

Calculus 7	3 (3,0)
English 5	2 (2,0)
Phys. Chemistry 7	5 (3,4)
Quant. Anal. 9	2 (0,4)
Organic Chem. 11	3 (2,2)
Mineralogy 7	3 (2,2)
Mil. Science 5	3.5 (2,3)

21.5

English 6	2 (2,0)
Phys. Chemistry 8	5 (3,4)
Mineralogy 8	3 (2,2)
Mil. Science 6	3.5 (2,3)
Electives	8.

21.5

ELECTIVES—

Organic Chem. 12	3 (2,2)
Metallurgy 16	4 (4,0)
Mechanical Eng. 4	4 (3,2)
Gas & Fuel Anal. 10	1 (0,2)

SENIOR YEAR

Economics—Econ. 1	2 (2,0)
History of Chem. 17	2 (2,0)
Inorganic Chem. 21	2 (2,0)
Colloid Chemistry 19	2 (2,0)
Technical Anal. 23	3 (0,6)
Mil. Science 7	3.5 (2,3)
Electives	7.

21.5

Sociology—Econ. 2	2 (2,0)
Stoichiometry 18	2 (2,0)
Inorganic Chem. 22	2 (2,0)
Colloid Chemistry 20	2 (2,0)
Thesis 24	4 (0,8)
Mil. Science 8	3.5 (2,3)
Electives	6.

21.5

Senior Electives

Mechanical Engineering 11	4 (3,2)
Chemical Geology 5	2 (2,0)
Bacteriology 1	4 (2,4)
Electrical Eng. 7	3 (2,2)
Technical Anal. 23	1 (0,2)

Selected topics in Chem. 26	4 (4,0)
Advanced Lab. Practice 28	2.4 (0,4,8)
Bacteriology 4	4 (2,4)

V.—CIVIL ENGINEERING

This course is intended to prepare young men for entrance upon professional practice in some of the many branches of civil engineering, and also to meet the needs of those who, having been engaged in engineering work without a course of instruction, desire to equip themselves for more successful competition with those who have had such instruction.

In connection with the technical studies, liberal training is given in English, history, economics, pure mathematics, and the physical sciences. The course will also be found to embrace a considerable amount of drawing, shop work, and short courses in electrical engineering and mechanical engineering.

The distinctive work pursued by students in this course includes the field and office work of surveying and leveling; topographic surveying and drafting; the location and construction of railroads and highways, and the bridges and other structures in connection therewith; involving investigation as to the strength of the materials of construction and the theories involved in the use thereof; masonry construction; foundations on land and under water; a particular study of highway engineering, including a laboratory course covering all the standard tests of highway material, both bituminous and non-bituminous; municipal and sanitary engineering, including water-supply, sewerage and drainage; and a brief study of engineering law including contracts and specifications. Actual design, as well as analytic investigation, is given in all cases.

COURSE V.—CIVIL ENGINEERING**FRESHMAN YEAR****First Semester**

Mathematics 3	5	(5,0)
English 1	3	(3,0)
History 1	3	(3,0)
Physics 1	3	(2,2)
Shop 1, 17	2	(0,4)
Drawing 5, 9	2	(0,4)
Military Science 1	1.5	(0,3)

 19.5
Second Semester

Mathematics 4	5	(5,0)
English 2	3	(3,0)
History 2	3	(3,0)
Physics 2	3	(2,2)
Shop 2, 18	2	(0,4)
Drawing 6, 10	2	(0,4)
Military Science 2	1.5	(0,3)

 19.5
SOPHOMORE YEAR

Analytics—Math. 5	4	(4,0)
English 3	3	(3,0)
Chemistry 1b	3	(2,2)
Physics 5, 7	4	(3,2)
Surveying—C. E. 1	4	(2,4)
Descriptive Geom.—Draw. 13	1	(0,2)
Military Science 3	1.5	(0,3)

 20.5

Calculus—Math. 6	4	(4,0)
English 4	3	(3,0)
Chemistry 2b	3	(2,2)
Physics 6, 8	4	(3,2)
Surveying—C. E. 2	4	(2,4)
Drawing 16	1	(0,2)
Military Science 4	1.5	(0,3)

 20.5
JUNIOR YEAR

Calculus—Math. 7	3	(3,0)
English 5	2	(2,0)
Mechanics—M. E. 3	3	(3,0)
Geology 3	2	(2,0)
R. R. Location—C. E. 7	2	(0,4)
R. R. Curves—C. E. 5	3	(3,0)
Shop 15	1.5	(0,3)
Military Science 5	3.5	(2,3)

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Mechanical Engr.—M. E. 4	4	(3,2)
English 6	2	(2,0)
Graphic Statics—C. E. 12	2	(1,2)
Str. Materials—C. E. 10	3	(3,0)
R. R. Location—C. E. 8	2	(0,4)
Design—C. E. 14	2	(0,4)
Astronomy—Physics 14	2	(2,0)
Military Science 6	3.5	(2,3)

 20.5
SENIOR YEAR

Economics—Econ. 1	2	(2,0)
Masonry—C. E. 21	2	(2,0)
Roads—C. E. 23	3	(3,0)
Hydraulics—C. E. 17	2	(2,0)
Electrical Eng.—E. E. 7	3	(2,2)
Mechanical Eng.—M. E. 9	4	(3,2)
Road Materials—C. E. 31	1.5	(0,3)
Military Science 7	3.5	(2,3)

 21

Sociology—Econ. 2	2	(2,0)
Water Supply—C. E. 24	3	(3,0)
Sewerage—C. E. 26	3	(3,0)
Eng. Relations—C. E. 28	1	(1,0)
Bridge Design—C. E. 16	3	(2,2)
Eng. Investigations—C. E. 30	2	(0,4)
Road Materials—C. E. 32	1.5	(0,3)
Thesis—C. E. 34	1	(0,2)
Military Science 8	3.5	(2,3)

 20

VI.—ELECTRICAL ENGINEERING

Electrical engineering is developing so rapidly and is being applied in such widely different fields that it is impossible for any college course to cover it adequately. There are, however, certain fundamental laws which underlie all the important applications of electricity. In the careful study of these laws and a few of the more fundamental applications, this course attempts to lay the foundation on which the student may rapidly build his professional career in any branch of electrical engineering.

The course includes the study of those subjects which form a necessary foundation for the study of electrical theory and practice; sufficient drawing and shop work to develop the co-ordination between mind and hand, and at the same time give the student some idea of the possibilities of engineering materials; and other subjects which broaden his intellectual growth. He is encouraged to take an interest in public affairs, to give time to more extensive and diversified reading, and to enter into various student activities.

COURSE VI.—ELECTRICAL ENGINEERING**FRESHMAN YEAR****First Semester**

Mathematics 3	5	(5,0)
English 1	3	(3,0)
History 1	3	(3,0)
Physics 1	3	(2,2)
Shop 1, 17	2	(0,4)
Drawing 5, 9	2	(0,4)
Military Science 1	1.5	(0,3)

 19.5
Second Semester

Mathematics 4	5	(5,0)
English 2	3	(3,0)
History 2	3	(3,0)
Physics 2	3	(2,2)
Shop 2, 18	2	(0,4)
Drawing 6, 10	2	(0,4)
Military Science 2	1.5	(0,3)

 19.5
SOPHOMORE YEAR

Analytics—Math. 5	4	(4,0)
English 3	3	(3,0)
Chemistry 1b	3	(2,2)
Physics 5, 7	4	(3,2)
Surveying—C. E. 3	2	(1,2)
Shop 7, 21	2	(0,4)
Descriptive Geom.—Draw. 13	1	(0,2)
Military Science 3	1.5	(0,3)

 20.5

Calculus—Math. 6	4	(4,0)
English 4	3	(3,0)
Chemistry 2b	3	(2,2)
Physics 6, 8	4	(3,2)
Surveying—C. E. 4	2	(1,2)
Shop 8, 22	2	(0,4)
Drawing 14	1	(0,2)
Military Science 4	1.5	(0,3)

 20.5
JUNIOR YEAR

English 5	2	(2,0)
Mechanics—M. E. 1	3	(3,0)
Calculus—Math. 7	3	(3,0)
Electrical Egr. E. E. 1	4.5	(3,3)
Design—Drawing 17	1.5	(0,3)
Shop 13	2.5	(0,5)
Military Science 5	3.5	(2,3)

 20

Mechanical Engr.—M. E. 4	4	(3,2)
English 6	2	(2,0)
Mechanics—M. E. 2	3	(3,0)
Electrical Engr.—E. E. 2	4.5	(3,3)
Design—Drawing 18	1.5	(0,3)
Shop 14	1.5	(0,3)
Military Science 6	3.5	(2,3)

 20
SENIOR YEAR

Economics—Econ. 1	2	(2,0)
Str. Materials—C. E. 19	3	(3,0)
Electrical Engr. E. E. 3	7	(5,4)
Mechanical Engr.—M. E. 7	4	(3,2)
Design—M. E. 13	1	(0,2)
Military Science 7	3.5	(2,3)

 20.5

Sociology—Econ. 2	2	(2,0)
Hydraulics—C. E. 18	2	(2,0)
Electrical Engr.—E. E. 4	7.5	(5,5)
Mechanical Engr.—M. E. 8	4	(3,2)
Design—E. E. 10	1	(0,2)
Military Science 8	3.5	(2,3)

 20.5

VII.—MECHANICAL ENGINEERING

The course in mechanical engineering is designed to give the graduate as broad a training as possible and at the same time to fit him for some specific type of work.

It embraces practically all forms of engineering which have for their objects the application of the forces of nature to the accomplishment of the processes of industry. The course is designed to give an intimate knowledge of the materials used in engineering, the laws of mechanics and the characteristics of various types of machinery.

The shop courses embrace wood work, forge work, foundry and machine work. The purpose of this instruction is not to turn out skilled workmen but to train those faculties of mind which can best be reached through the work of the hand, and at the same time, give the student a clear knowledge of the characteristics and possibilities of the materials used in engineering.

Considerable time is given to the study of the laws of the physical sciences, in such subjects as physics, chemistry, mechanics, electricity and magnetism and thermodynamics.

During the fourth year stress is laid on the application of the fundamental principles already covered so that the graduate may be able to design or manage those types of machines which ordinarily come under the supervision of the mechanical engineer.

The mechanical engineer should have a good liberal education, so in addition to the regular technical work comprehensive training is given in English, history, economics, civics and related subjects.

COURSE VII.—MECHANICAL ENGINEERING**FRESHMAN YEAR****First Semester**

Mathematics 3	5	(5,0)
English 1	3	(3,0)
History 1	3	(3,0)
Physics 1	3	(2,2)
Shop 1, 17	2	(0,4)
Drawing 5, 9	2	(0,4)
Military Science 1	1.5	(0,3)
19.5		

Second Semester

Mathematics 4	5	(5,0)
English 2	2	(3,0)
History 2	3	(3,0)
Physics 2	3	(2,2)
Shop 2, 18	2	(0,4)
Drawing 6, 10	2	(0,4)
Military Science 2	1.5	(0,3)
19.5		

SOPHOMORE YEAR

Analytics—Math. 5	4	(4,0)	Calculus—Math. 6	4	(4,0)
English 3	3	(3,0)	English 4	3	(3,0)
Chemistry 1b	3	(2,2)	Chemistry 2b	3	(2,2)
Physics 5, 7.	4	(3,2)	Physics 6, 8	4	(3,2)
Surveying—C. E. 3	2	(1,2)	Surveying—C. E. 4	2	(1,2)
Shop 7, 21	2	(0,4)	Shop 8, 22	2	(0,4)
Descriptive Geom.—Draw. 13	1	(0,2)	Drawing 14	1	(0,2)
Military Science 3	1.5	(0,3)	Military Science 4	1.5	(0,3)
20.5			20.5		

JUNIOR YEAR

Calculus—Math. 7	3	(3,0)	Mechanical Engr.—M. E. 4	4	(3,2)
English 5	2	(2,0)	English 6	2	(2,0)
Mechanics—M. E. 1	3	(3,0)	Mechanics—M. E. 2	3	(3,0)
Electrical Engr. E. E. 1	4.5	(3,3)	Electrical Engr.—E. E. 2	4.5	(3,3)
Design—Drawing 17	1.5	(0,3)	Design—Drawing 18	1.5	(0,3)
Shop 13	2.5	(0,5)	Shop 14	1.5	(0,3)
Military Science 5	3.5	(2,3)	Military Science 6	3.5	(2,3)
20			20		

SENIOR YEAR

Economics—Econ. 1	2	(2,0)	Sociology—Econ. 2	2	(2,0)
Str. Materials—C. E. 19	3	(3,0)	Hydraulics—C. E. 18	2	(2,0)
Mechanical Engr.—M. E. 5	7	(5,4)	Mechanical Engr.—M. E. 6	7.5	(5,5)
Electrical Engr. E. E. 5	4	(3,2)	Electrical Engr.—E. E. 6	4	(3,2)
Design—E. E. 9	1	(0,2)	Design—M. E. 14	1	(0,2)
Military Science 7	3.5	(2,3)	Military Science 8	3.5	(2,3)
20.5			20		

VIII.—TEXTILE INDUSTRY

The course in Textile Industry is designed to give the student sound training, both theoretical and practical, in the sciences upon which manufacturing processes are based. The curriculum of the course recognizes that in a profession of so many aspects a broad general education, and a thorough knowledge of the underlying principles are necessary for its successful practice.

The first year of the course is the same as that of the other engineering courses offered. The study of textile subjects begins with the second year, and more time is given to these subjects in the Junior and Senior years. The practical work is carried on for the purpose of developing in the student habits of accurate observation, and some skill in manipulation, supplementing the theoretical work. In this work special consideration is given to economy of time, precision of results, and attention to details as well as to methods of fundamental importance.

This course does not presume to fit one for an executive position in a mill, but the graduate is in possession of such information, and has acquired such knowledge and experience that he may look forward to a successful career provided he has the necessary energy, application, and tact, and a willingness to begin at the bottom.

COURSE VIII.—TEXTILE INDUSTRY**FRESHMAN YEAR****First Semester**

Mathematics 3	5	(5,0)
English 1	3	(3,0)
History 1	3	(3,0)
Physics 1	3	(2,2)
Shop 1, 17	2	(0,4)
Drawing 5, 9	2	(0,4)
Military Science 1	1.5	(0,3)

 19.5
Second Semester

Mathematics 4	5	(5,0)
English 2	3	(3,0)
History 2	3	(3,0)
Physics 2	3	(2,2)
Shop 2, 18	2	(0,4)
Drawing 6, 10	2	(0,4)
Military Science 2	1.5	(0,3)

 19.5
SOPHOMORE YEAR

Analytics—Math. 5	4	(4,0)	Calculus—Math. 6	4	(4,0)
English 3	3	(3,0)	English 4	3	(3,0)
Chemistry 1b	3	(2,2)	Chemistry 2b	3	(2,2)
Surveying—C. E. 3	2	(1,2)	Surveying—C. E. 4	2	(1,2)
Descriptive Geom.—Drawing 3	1	(0,2)	Drawing 14	1	(0,2)
Pickers—Yarn Mfg. 1.	3	(2,2)	Cards and Drw Frames Yarn, Mfg 2 3	3	(2,2)
Fab. Construction—Tech. Fab. 1	2	(2,0)	Design—Tech. Fab 2	2	(2,0)
Weaving—Tech. Fab. 11	1	(0,2)	Loom Fixing—Tech. Fab. 12	1	(0,2)
Military Science 3	1.5	(0,3)	Military Science 4	1.5	(0,3)

 20.5

 20.5
JUNIOR YEAR

Calculus—Math. 7	3	(3,0)	Mechanical Engineering 4	4	(3,2)
English 5	2	(2,0)	English 6	2	(2,0)
Mechanics—M. E. 1	3	(3,0)	Mechanics—M. E. 2	3	(3,0)
Roving Frames—Yarn Mfg. 3	3	(2,2)	Spinning—Yarn Mfg. 4	3	(2,2)
Dobby Design—Tech. Fab. 3	1	(0,2)	Fab. Analysis—Tech. Fab. 6	1	(0,2)
Fab. Analysis—Tech. Fab. 5	1	(0,2)	Weaving—Tech. Fab. 14	1	(0,2)
Weaving—Tech. Fab. 13	1	(0,2)	Org. Chem.—Text. Chem. 2	3	(2,2)
Org. Chem.—Textile Chem. 1	3	(2,2)	Military Science 5	3.5	(2,3)
Military Science 4	3.5	(2,3)			

 20.5

 20.5
SENIOR YEAR

Economics—Econ. 1	2	(2,0)	Sociology—Econ. 2	2	(2,0)
Mechanical Engineering 11	4	(3,2)	Electrical Eng. 7	3	(2,2)
Weave Methods—Tech. Fab. 9	3	(3,0)	Combers—Yarn Mfg. 6	2	(1,2)
Weave Methods—Tech. Fab. 15, 1	(0,2)	Mill Econom.—Yarn Mfg. 8	1	(1,0)	
Spinning—Yarn Mfg. 5	3	(2,2)	Jacq. Design—Tech Fab. 8	4	(4,0)
Designing and Prep. Tech. Fab. 7....	2	(2,0)	Weaving—Tech. Fab. 16	1	(0,2)
			Knitting—Tech, Fab. 18	1	(0,2)
Applied Chem.—Textile Chem. 3	3	(2,2)	Dyeing—Text. Chem. 4	2	(0,4)
Military Science 7	3.5	(2,3)	Military Science 8	3.5	(2,3)

 21.5

 19.5

VIII(a).—INDUSTRIAL EDUCATION

By the enactment of the Smith-Hughes law for the promotion of vocational education, Congress has provided funds for encouraging and assisting in the development of instruction throughout the country in agriculture, home economics, and trades and industries.

This course has for its purpose the preparation of young men for positions of usefulness and responsibility in the trades and industries of the state. The course includes instruction in the fundamental principles of education, of engineering, and of the textile industry.

The prime purpose of the course is to prepare for positions as teachers of trade and industrial subjects, or as "service man" in a manufacturing establishment. As the textile industry is the dominant one in the state, that industry is given special prominence. The course is essentially a combination of instruction in the textile industry and the training of industrial teachers.

COURSE VIII(a).—INDUSTRIAL EDUCATION

FRESHMAN and SOPHOMORE subjects same as Course VIII.

JUNIOR YEAR**First Semester****Second Semester**

Calculus—Math. 7	3	(3,0)	Mechanical Engineering 4	4	(3,2)
English 5		(2,0)	English 6	2	(2,0)
Industrial Education 5	3	(1,4)	Industrial Education 8	3	(2,2)
Roving Frames—Yarn Mfg. 3	3	(2,2)	Spinning—Yarn Mfg. 4	3	(2,2)
Dobby Design—Tech. Fab. 3	1	(0,2)			
Fab. Analysis—Tech. Fab. 5	1	(0,2)	Fab. Analysis—Tech. Fab. 6	1	(0,2)
Weaving—Tech. Fab. 13	1	(0,2)	Weaving—Tech. Fab. 14	1	(0,2)
Org. Chemistry—Text. Chem. 1	3	(2,2)	Org. Chem.—Text. Chem. 2	3	(2,2)
Military Science 4	3.5	(2,3)	Military Science 5	3.5	(2,3)
	20.5			20.5	

SENIOR YEAR**First Semester****Second Semester**

Economics—Econ. 1	2	(2,0)	Sociology—Econ. 2	2	(2,0)
Ind. Education Ed. 7	4	(0,8)	Electrical Eng. 7	3	(2,2)
Military Science 7	3.5	(2,3)	Ind. Education—Ed. 10	3	(3,0)
Electives	11		Ind. Education—Ed. 12	5	(0,10)
			Military Science 8	3.5	(2,3)
			Electives	4	
	20.5			20.5	

Students taking the course in Industrial Education will be permitted to elect in the Senior Year under the direction of the Director of the Textile Department such supplies, as will best fit them for the field of industrial education in which they are most interested.

COURSE IX—ACADEMIC

This course is planned to meet the needs of those students who for any reason desire general training in the natural and social sciences. It is particularly recommended for men preparing for medicine, law, teaching, and scientific investigation. It is designed to provide the maximum of adaptability to individual requirements.

Entrance.—Candidates for the B. S. degree in this course must present not less than 15 standard high school units for entrance, divided as follows: English 3 units, mathematics 3 units, history 1 unit, science 1 unit, and one foreign language 2 units. The remaining 5 units may be chosen at will with regard to subjects. Candidates not presenting 2 units in one foreign language may however, be entered upon condition of successful completion of two years of one language during his college course, provided he meets the other entrance requirements and presents not less than a total of 15 units.

The Basic Course

The following basic course is required of all candidates for a degree in this course:

FRESHMAN YEAR

First Semester		Second Semester	
English 1	(3,0)	English 2	(3,0)
History 1	(3,0)	History 2	(3,0)
Mathematics 1	(3,0)	Mathematics 2	(3,0)
Chemistry 1	(3,2)	Chemistry 2	(3,2)
Modern Language*	(3,0)	Modern Language*	(3,0)
Military Drill	(0,3)	Military Drill	(0,3)
Shop or Drawing	(0,2)	Shop or Drawing	(0,2)

*In lieu of a modern language students may choose not less than 8 semester credit hours during the session from the elementary courses offered by the following divisions: Botany and Bacteriology, Geology and Mineralogy, and Zoology and Entomology.

SOPHOMORE YEAR

First Semester		Second Semester	
English 3	(3,6)	English 4	(3,0)
Physics 1	(3,2)	Physics 2	(3,2)
Military Drill	(0,3)	Military Drill	(0,3)
Modern Language		Modern Language	
or	(3,0)	or	(3,0)
A Natural Science		A Natural Science	

JUNIOR YEAR

First Semester		Second Semester	
English 5	(2,0)	English 6	(2,0)
Military Drill	(0,3)	Military Drill	(0,3)

SENIOR YEAR

First Semester		Second Semester	
Economics	(2,0)	Sociology	(2,0)
Military Drill	(0,3)	Military Drill	(0,3)

Total required work for the basic course not less than 74 semester credit hours.

The Major and the Minor

In addition to the basic course outlined above, each student must select one of the groups listed below as his major group and must present for graduation not less than 30 semester credit hours from the courses offered by the departments or divisions listed in the group. In the other group he must present as a minor not less than 15 semester credit hours.

Group I—Agricultural Economics, Economics and Sociology, Education, English, History, and Modern Languages.

Group II—Botany and Bacteriology, Chemistry, Geology and Mineralogy, Mathematics, Physics, and Zoology and Entomology.

In lieu of either the major or the minor, students who have had the prerequisites may be permitted to substitute an equivalent number of semester credit hours in vocational or prevocational courses offered by the following departments of the College: I Agriculture, II Chemistry, III Engineering, and IV Textile. In order to make this choice the student must file in advance with the Registrar of the College a petition outlining the courses desired and stating the reasons for the vocational choice. To become effective this petition must be approved by the Registrar of the College, the Director of the Academic Department, and the director of the department concerned in the choice.

Other Requirements.—In addition to the basic course, including the major and the minor, each candidate for graduation shall present not less than 27 semester credit hours of electives chosen at will from the courses offered in any of the departments or divisions of the college.

Not more than 22 credit hours of work may be taken in any one semester.

Freshman courses taken in the junior or senior years will receive only two-thirds of the usual credit.

Credit will not be given for only one year of a foreign language.

Students in this course will meet the Director of the Academic Department or his representative for advice or assistance.

Summary

Basic required course, not less than	74 semester credit hours
One major, not less than	30 semester credit hours
One minor, not less than	15 semester credit hours
Free electives, not less than	27 semester credit hours
Total, not less than	146 semester credit hours

Suggestions—Students intending to do advanced work in mathematics or the natural sciences should take Mathematics 3, 4 in the Freshman year instead of the regularly prescribed Mathematics 1, 2.

Those who wish to apply for a professional teacher's certificate from any state department of education should complete not less than 18 semester credit hours from the courses offered by the division of Education.

In pursuing this course it will be found advantageous to complete the major and the minor before beginning work upon the free electives.

PRE-MEDICAL COURSE

Students wishing to complete in two years a pre-medical course covering the minimum requirements for entrance into a standard medical college should take the first two years of the Academic Course but should take Chemistry 1a and 2a instead of Chemistry 1 and 2. They should also complete Chemistry 5 and 6, two years of a foreign language, and not less than 8 semester credit hours in biology (botany and zoology), including at least 4 credit hours in laboratory. Psychology, drawing, and sociology are recommended as electives. A total of at least 73 credit hours should be completed for a pre-medical certificate.

THE SHORT COURSES

COURSE XII—AGRICULTURE

Normally, this course extends through two sessions. The subjects are selected from the regular programs of study and are arranged to suit the needs of the class. This program should be of great value to the young man who desires to spend not more than two years in College.

COURSE XI—TEXTILE INDUSTRY.

This two-year course is for the accomodation of young men who have only two years to devote to college work. The subjects are chosen from the regular college course in Textile Engineering and the schedules are made up under the supervision of the Director of the Textile Department. To enter the course the applicant must have had at least one year's experience in some cotton mill, as well as meet the general requirements for admission.

TEN WEEKS COURSES IN AGRICULTURE

These are intensely practical courses open only to men and boys with farm experience. The work will begin immediately after the Christmas holidays, each week being devoted to the study of one of several phases of Agriculture. It will be possible to spend from one to ten weeks. The courses to be offered in 1926 are—Bee Keeping, Dairy Husbandry, Swine Husbandry, Poultry Husbandry, Farm Cost Accounting, Soil Fertility, Cotton Growing Under Boll Weevil Conditions, Fruit Growing, Truck Growing, Farm Machinery.

There are no scholastic requirements for admission to these courses. They are open to any farm boy or man.

DESCRIPTION OF SUBJECTS

For convenience of reference all subjects are grouped under general heads. In the description of subjects, the first line gives (a) general classification and number, (b) specific title, (c) the semester taught, and (d) the names of the instructors. The second line gives the class and course in which the subject occurs. The figures in parentheses indicate the number of hours a week, theory and practice, respectively devoted to the subject.

Odd numbers are assigned to subjects taught during the first semester and even numbers to those taught during the second semester. A subject taught throughout the session is given both an odd and an even number.

AGRONOMY

Acting Professor Buie

Associate Professor McAlister

Assistant Professor Collings

Assistant Professor Robinson

AGRONOMY 1—Field Crops—Semester 1 (Collings)

Freshman I: (3 and 2)

A detailed course dealing with the history, origin, botanical characteristics, physiology, ecology, varieties, breeding, soil adaptations, fertilizer requirements, and the cultural methods of cotton and corn. Laboratory largely devoted to field studies of these crops. Recitations, assigned reading, problems.

Text -book: "Field crops for the Cotton Belt."—Morgan.

AGRONOMY 2—Farm Machinery—Semester 2. ... (McAlister)

Somphmore I: (3 and 2)

A study of the construction, adjustment and operation of the latest improved machinery for the farm including internal combustion engines. Laboratory work consists of a study of the various machines together with rope work, belt lacing and other farm practices.

Text-book: "Equipment for the Farm and Farmstead."—Ramsower.

AGRONOMY 3—Farm Management—Semester 1. (Robinson)

Junior 1: (2 and 2)

The economics of farming. Types of farming. and the economic, physical and biological factors determining them; price movements of agricultural products as they affect farm plans; selection of farm enterprises for highest profits; physical and financial organization of farms and their operation in areas representative of the important types; farm records; farmer's credit and marketing problems.

Text-book: "The Management of the Farm"—Moorhouse.

AGRONOMY 4.—Soils—Semester 2. (Collings)

Junior I: (3 and 2)

A fundamental course in soils. It is intended to cover the basic principles of soil physics, soil fertility, soil biology, and soil management. It deals with the soil as a reservoir for water, as a medium for root development, as a source of nutrients, and as a home of organisms.

A laboratory course is given which deals almost exclusively with the physical properties of the soil.

Text-book: "The Nature and Properties of Soils."—Lyon, Buckman.

AGRONOMY 5.—Genetics—Semester 1. (Buie)

Senior I, IX: Elective: (2 and 2)

A course dealing with the laws of heredity and equally applicable to plants or animals.

Text-book: "Principles of Genetics" Sinnott and Dunn.

AGRONOMY 6.—Plant Breeding—Semester 2. (Buie)

Seniors I. Elective: (2 and 2)

Prerequisite: Agronomy 5.

A study of methods of improving field crops by breeding. All of the common field crops are included and especial emphasis is placed on cotton, corn, tobacco, small grains and forage plants.

Text-book: "Breeding Crop Plants"—Hays and Garber.

AGRONOMY 7.—Forage Crops.—Semester 1. (Collings)

Senior I: (2 and 2)

A course dealing with the characteristics of the various forage crops, with special emphasis on those grown in this state. These crops are studied with special reference to their adaptations, growing, harvesting composition, value and uses, and also with reference to their place in our cropping system.

Text-book: "Forage Crops and Their Culture"—Piper.

AGRONOMY 9.—Advanced Cotton—Semester 1 (Collings)

Senior 1: Elective: (2 and 2)

Prerequisite: Agronomy 1.

An advanced course in cotton dealing with all phases of cotton production.

Text-book: Books and bulletins will be assigned as references.

AGRONOMY 10.—The Cereals—Semester 2 (Buie)

Senior 1: Elective: (2 and 2)

Prerequisite: Agronomy 1, 2, 3 and 4.

A general course dealing with the cereals. Particular emphasis is laid upon the production of these crops in the south-eastern part of the United States.

Text-book: "The Small Grains"—Carleton.

"The Corn Crops"—Montgomery.

AGRONOMY 12.—Fertility and Fertilizers—Semester 2. (Collings)

Senior I: (2 and 2)

Prerequisite: Agronomy 4.

A course dealing with the history and development of theories of soil fertility in their relation to present day problems in soil fertility. A study is made of the sources, composition, value, and uses of fertilizers and manures and theories of soil fertility.

Text-book: "Manures and Fertilizers"—Wheeler; "Soil Management"—Bear.

AGRONOMY 13—Agricultural Surveying and Drainage—Semester 1. (McAlister)

Seniors I. Elective: (2 and 2)

Surveying small areas with tape, level and rod, computing areas, topographic mapping. Design and study of drainage systems. Prevention of soil erosion with special emphasis on terracing.

Text-book: "Land Drainage"—Powers and Teeter.

AGRONOMY 14—Farm Building and Equipment—Semester 2. (McAlister)

Senior I. Elective: (2 and 2)

Lectures and laboratory exercises on the planning and arrangement of farm buildings. Special study of heating, lighting, water supply and sewage disposal systems for the farm homes.

AGRONOMY 15.—Farm Shop—Semester 1. (McAlister)

Senior I. Elective: (1 and 2)

This course is designed especially for Agricultural Education seniors who are prospective teachers of this subject in high schools. Special emphasis is placed on farm wood work and how to make simple repairs.

AGRONOMY 16—Farm Management—Semester 2. (Robinson)

Senior 1. Elective: (2 and 2)

An advanced course designed for students expecting to become agricultural workers in the capacity of Agricultural Teachers or County Agents. Farm management surveys; farm records; tenancy and farm lease forms; farm law; the economic and statistical position of the agricultural products of the state will be studied in detail.

Text book: "Farm Management."—Adams and "The Agricultural Situation."—Warren and Pearson.

AGRONOMY 17—Marketing—Semester 1. (Robinson)

Senior 1. Electives: (2 and 2)

A course dealing with: the principles of marketing, commodity marketing and marketing programs. Factors determining prices; marketing services; market mechanism, mar-

ket grades and standardization; storage and warehousing; transportation; future trading; fundamentals of cooperation. Inspection, and grading of perishable and stable products, films on marketing and field studies will be given in laboratory.

Text book: "Marketing of Agricultural Products."—Boyle.

AGRONOMY 19—Farm Motors—Semester 1. (McAlister)

Junior I. Elective: (2 and 2)

This is a study of power as applied to agricultural operations through the various forms of farm motors, such as animals, gas engines, tractors, etc.

Prerequisite: Agronomy 2—Farm Machinery.

Division Rooms and Equipment.

The Division of Agronomy occupies rooms on second floor of Main Building and the building below the Dairy Building, where the farm machinery is stored and where farm machinery work is given.

The Division offices are all on the second floor of the Main Building. The lecture room and farm crops laboratory are also on this floor. The farm crops laboratory is well supplied with equipment and material for teaching the characteristics of the various crops and for a study of market classes and grades of the grain crops. Much of our laboratory work is conducted in the fields with the growing crops.

The soils laboratory is located in room No. 1, in the basement of Agricultural Hall, and is well supplied with modern equipment for teaching soil physics.

The farm machinery laboratory work is given in the large one story building, known as Farm Machinery Hall. This building has a concrete floor and is well equipped with the latest and best machinery, tractors, gas engines, farm lighting plants, and land drainage equipment.

AGRICULTURAL ECONOMICS

Professor Mills.

AGRICULTURAL ECONOMICS 1.—General Agricultural Economics
Semester 1, (Mills).

Senior 1, Elective: (2 and 0)

The application of the principles of Economics to Agriculture. The farmer as a business manager, rent, interest, farm wages, taxation, etc., will be studied.

AGRICULTURAL ECONOMICS 2.—Land Economics.—Semester 2.
(Mills)

Senior, Elective. (3 and 0)

Land as a factor of agricultural production. Its value and methods of appraisal; renting and leasing; tenancy and ownership, land purchase and settlement as assisted by governments. Other methods of financing farm-purchase.

AGRICULTURAL ECONOMICS 3.—Rural Sociology.—Semester 1.
(Mills.)

Senior I. Elective: (3 and 0).

Its purpose and methods. The relation of scientific agriculture to the rural community. Rural organization for business, health education, recreation, etc.

AGRICULTURAL ECONOMICS 4.—Rural Sociology.—Semester 2.
(Mills).

Senior I.—Elective: (2 and 2).

County and state government as affecting the rural community. National movements with local community organization.

AGRICULTURAL ECONOMICS 5.—Bible.—Semester 2 (Mills).

Senior. Elective: (1 and 0)

The Bible is studied (a) as history, showing the development of the Jewish people and their relations with other nations, (b) as the rule of faith and practice, discussing its peculiar claims for itself, its ethical content, and its influence upon the world.

ANIMAL HUSBANDRY

Professor Starkey

Associate Professor Morgan

ANIMAL HUSBANDRY 2—Types, Breeds, Market Classes and Grades of Farm Animals—Semesters 1 and 2 (Morgan)

Sophomore I. (3 and 2) First Semester.

Freshman I. (3 and 2) Second Semester.

This course is designed to give the student a knowledge of the characteristics and use of the various types of farm animals, the history, methods of improvement, and characteristics of the leading breeds; market demands and market classification of live stock.

Text-book: "Types and Market Classes of Live Stock"—Vaughan. "Types and Breeds of Farm Animals"—Plumb.

ANIMAL HUSBANDRY 3—Principles of Feeding—Semester 1. (Morgan)

Junior I. Elective: (2 and 2)

A study of the composition of feeds, use of feeds, feed requirements and calculation of balanced rations for farm animals; classification and value of feedstuffs.

Text-books: "Feeds and Feeding"—Henry and Morrison.

ANIMAL HUSBANDRY 4—Animal Breeding—Semester 2. (Morgan)

Senior I. Elective: (2 and 2)

Prerequisite: Animal Husbandry 2 and Genetics.

This course is an advanced study in breeding which includes the practical application of the principles of genetics to the breeding of farm animals. The course includes a discussion of the subjects of reproduction, variation, heredity, selections, line breeding, inbreedings, cross breeding, grading and other subjects correlated with the breeding and improvement of farm animals.

Text-book: "Animal Breeding"—Winters.

ANIMAL HUSBANDRY 5—Feeds and Feeding—Semester 1. (Starkey)

Senior I. Elective: (2 and 2)

Prerequisite: Animal Husbandry 3.

A detailed study of the composition, digestibility, use and value of different feedstuffs; an advanced study of digestion, absorption, metabolism, and functions of food nutrients; feed requirements and feeding standards.

Text-book: "Feeds and Feeding"—Henry and Morrison.

ANIMAL HUSBANDRY 6—POULTRY PRODUCTION—Semester 2 (Morgan)

Senior I. Elective: (2 and 2)

A study of the general principles of poultry production, including the importance and scope of the industry, incubation, brooding, housing, feeding, flock management and parasites and diseases.

Text-book: "Poultry Production"—Lippincott

**ANIMAL HUSBANDRY 7—ANIMAL PRODUCTION—HORSES
AND MULES AND BEEF PRODUCTION—Semester 1**
(Morgan)

Senior I. Elective: (2 and 2)

Prerequisite: Animal Husbandry 2 and 3

In this course the work is divided into two distinct units. For the first half of the semester a study of the breeding, feeding, care and management of horses and mules is taken up. This is followed by a study of the breeding, care and management of beef cattle, including a careful study of feeding and marketing methods. Text-books supplemented by station bulletins.

Text-books: "Productive Horse Husbandry"—Gay. "Beef Cattle"—Snapp.

**ANIMAL HUSBANDRY 8—PORK PRODUCTION AND SHEEP
PRODUCTION—Semester 2 (Starkey)**

Senior I. Elective (2 and 2)

Prerequisite: Animal Husbandry (2 and 3)

The feeding, breeding and management of sheep and swine.

Text-books: "Pork Production"—Smith

"Productive Sheep Husbandry"—Coffey.

ANIMAL HUSBANDRY 8a.—Live Stock Judging—Semester 2.
(Morgan)

Junior. Elective: (0-2)

A course in live stock judging to prepare students who plan to major in Animal Husbandry for the live stock judging contest at the Southeastern Fair, which is held early in the Senior year. The fundamentals in judging and in giving reasons are taken up in detail.

**ANIMAL HUSBANDRY 9 —ADVANCED STOCK JUDGING AND
MEATS—Semester 1 (Morgan)**

Senior I. Elective (To be determined)

This is a course in the judging of breeding animals and fat stock, and in the slaughtering, cutting, and curing of meats, and the preparation of by-products.

Text-books: "Judging Farm Animals"—Plumb.

"Meats and Meat Products"—Tomhave.

ANIMAL HUSBANDRY 10—ANIMAL NUTRITION—Semester 2
(Starkey and LaMaster)

Senior Elective.

Prerequisite: Animal Husbandry 5 or Dairy Husbandry 9.

Recent developments in animal nutrition, covering the field of proteins, metabolism, vitamins, milk production, maintenance, and growth.

ARCHITECTURE**Professor Lee****Assistant Professor Crowgey****Instructor Siegler****ARCHITECTURE 2—Freehand Drawing—Semester 2 (Seigler)**

Freshman II. (0 and 4)

Prerequisite: Drawing 3.

This course covers angular and parallel perspective, the oblique plane, the perspective of circles, sectioning and shading.

The study of pencil technique is stressed for sketching purposes, and charcoal work from the cast is given in order to develop a correct sense of values, form and proportion.

**ARCHITECTURE 4—Elements of Architecture—Semester 2.
(Crowgey)**

Freshman II. (0 and 2)

Prerequisites: Drawing 3, 11.

A study of classic proportions and design with details of "The Orders" and their application.

Text-book: "The Five Orders of Architecture" from the system of Vignola as arranged by Pierre Esquiez.

ARCHITECTURE 6—Descriptive Geometry—Semester 2. (Crowgey)

Freshman II: (0 and 4)

Prerequisites: Drawing 3, 11.

The fundamental problems in descriptive geometry are studied and applied to the solution of problems in architecture. Also problems in the casting of conventional shadows of architectural forms and the theory and practice of architectural perspective are solved.

Text-book: To be selected.

Reference books: McGoodwin's "Shades and Shadows"; Lubschez "Perspective."

**ARCHITECTURE 7, 8—History of Architecture—Semesters 1 and
2. (Crowgey)**

Sophomore II: (3 and 0)

Study of historic styles and monuments of architecture, classic, mediaeval and Renaissance. This subject is given by illustrated lectures and text-book. The student is required to do research in the library and to make sketches.

Text-book: Hamlin's "History of Architecture."

ARCHITECTURE 9, 10—Cast Drawing—Semesters 1 and 2
(Siegler).

Sophomore II: (0 and 3)

Prerequisite : Architecture 2.

Thorough drill in drawing groups of simple casts, pencil, pen and ink, and charcoal rendering. Study of color in theory and practice. Brief study of anatomy. Sketching from life.

ARCHITECTURE 11, 12—Architectural Design—Semesters 1 and 2. (Crowgey)

Sophomore II: (0 and 14)

Prerequisites: Architecture 2, 4, 6.

A series of simple problems in design, applying classic proportions to modern buildings; criticisms, sketch problems, Beaux-Arts problems. Rendering in water color and other mediums.

Architectural library reference books and plates.

ARCHITECTURE 13, 14—Cast Drawing—Semesters 1 and 2
(Siegler).

Junior II: (0 and 2)

Prerequisites: Architecture 9, 10.

Advanced work in the drawing of antique sculpture and from life. Any medium may be used in which the student cares to work, such as charcoal, conte, pastel, etc.

ARCHITECTURE 15, 16.—Architectural Design—Semesters 1 and 2. (Crowgey)

Junior II: (0 and 10).

Prerequisites: Architecture 11 and 12

A series of problems in architectural design. Composition and planning. Sketch problems. Beaux-Arts problems.

Architectural library reference books and plates.

ARCHITECTURE 17, 18.—Building Construction—Semesters 1 and 2. (Lee)

Junior II: (3 and 2)

Prerequisites: Mathematics 5, 6.

Carpentry; study of building materials, their uses and forms; carpenter's, plasterer's and painter's work, details of frame construction, hardware, estimates and specifications; problems in calculation.

Text-books: Kidder's "Building Construction and Superintendence," Part II; Kidder's "Architects' and Builders' Pocket Book."

ARCHITECTURE 19, 20—Architectural Design—Semesters 1 and 2. (Crowgey)

Senior II. (0 and 11)

Prerequisites: Architecture 16, 17.

Advanced problems in architectural design. Composition, planning, etc., worked up in detail. Eight and ten hour sketch problems. Beaux-Arts problems, Historic ornament.

Architectural library books and plates as references.

ARCHITECTURE 21, 22.—Structural Design—Semesters 1 and 2. (Lee)

Senior II: (0 and 6)

Prerequisites: Architecture 17, 18.

Preparation of complete working drawings and specifications for frame and masonry buildings, detail drawings of the construction with necessary calculations. Steel and reinforced concrete design. Blue printing.

Text-book: Architectural library reference books and plates. Kidder's "Architects' and Builders' Pocket Book."

ARCHITECTURE 23, 24—Building Construction—Semesters 1 and 2. (Lee)

Senior II. (5 and 0)

Prerequisites: Architecture 17, 18.

Masonry; study of foundations, cement, lime, mortars, stone, brick, terra-cotta, details of masonry construction, fireproofing of buildings, reinforced concrete and steel construction, estimates, specifications, superintendence, problems in calculation, contracts, laws, ethics.

Text-books: Kidder's "Building Construction and Superintendence," Part I; Kidder's "Architects' and Builders' Pocket Book," A. I. A. Documents.

ARCHITECTURE 25, 26—Heat and Sanitation—Semesters 1 and 2 (Lee)

Senior II: (2 and 0)

Study of the various systems of heating and ventilating of buildings, together with apparatus used in each, such as boilers, fans, etc. Illumination of buildings.

Plumbing of buildings, including water and sewerage.

Text-book: Hoffman's "Handbook for Heating and Ventilating Engineers"; Instructor's notes.

Rooms and Equipment

The third floor of the engineering building is devoted entirely to the work in architecture. There are several rooms

used for architectural design with drafting tables and lockers; a studio for freehand and cast drawing with casts, models and easels; lecture room equipped with lantern and slides and samples of building materials; library containing a large number of volumes on architectural and allied subjects with many valuable plates and complete files of all important art and architectural magazines; and office for instructors.

The office of the professor of architecture and college architect and the blue printing rooms are on the second floor of this building.

BOTANY AND BACTERIOLOGY

Professor Barre

Associate Professor Aull

Associate Professor Rosenkrans

Instructor Rice

BOTANY 1.—General—Semester 1. (Rosenkrans and Rice)

Freshman I, III, IX, XIII: (2 and 4) (To be given
Sophomores in 1927-28.)

The structure and functions of the various parts of the higher seed plants, and the broad principles of metabolism, growth, and reproduction are first taken up in detail, followed by a study of the lower organisms.

The student is made familiar with the application of biological laws; and descriptions, life histories and the adaptation of representative organisms are considered. The practical work will consist of laboratory and field studies illustrating the more important phases of the theoretical work.

Text-book: "Botany with Agricultural Application."—Martin.

BOTANY 4—Elements of Forestry—Semester 2. (Rosenkrans)

Sophomore I, IX: (2 and 2)

A lecture course dealing with the general principles of forestry, together with the practical methods applied in lumbering, forest propagation, and conservation.

Text-book: "Elements of Forestry."—Moon and Brown.

BOTANY 3—Morphology of the Higher Plants—Semester 1 (Rosenkrans)

Sophomore I, IX, IX, XIII: (2 and 4)

This course considers the general form and structure of the higher plants, and the organs and tissues which compose them. It also

establishes the relationships of the various organs. A study is made of the development of the more complex plants from the simpler ones.

Text-book: "Text Book of Botany," Vol 1 Part I—Coulter, Barnes, and Cowles.

BOTANY 6—Plant Physiology—Semester 2. (Rosenkrans)

Junior I, IX, Elective: (2 and 4)

A study of the structure and functions of plants, the object being to teach the student how plants live and grow and why they are dependent on certain physical factors as light, water, air, etc.

Text-book: "Text Book of Botany," Vol. 1. Part II—Coulter Barnes and Cowles.

BOTANY 8—Plant Pathology—Semester 2—(Rosenkrans)

Senior I, IX, Elective: (2 and 2). Pre-requisite: Botany 6.

A systematic study of fungi with special reference to species causing diseases of economic plants. The students are taught to recognize the more common diseases, particularly in the early stages, and the whole question of prevention and practicable remedies is fully discussed. Methods of isolating, artificially cultivating, and inoculating with disease-causing organisms will be considered.

Text-book: "Fungous Diseases of Plants."—Duggar.

BACTERIOLOGY 1—General Bacteriology—Semester 1. (Aull)

Junior I; Senior III, IX: (2 and 4)

This course is designed to give the student a clear working knowledge of the bacteria, yeasts, and molds. A detailed study is made of the morphology and physiology of bacteria in relation to man and animals, and to the arts and sciences. The principal bacterial diseases of man are studied and means of control discussed.

In the laboratory bacteria are studied in their relation to food, heat, light, and disinfectants, and their relation and importance to agriculture is stressed. Several forms are studied in detail. This study consists of isolating, growing them upon the various media, staining and determining the organism. Particular attention is paid to types found in water, soil, and milk.

Text-book: Buchanan's "Bacteriology," Revised edition supplemented, by lectures, bulletins and parallel readings.

BACTERIOLOGY 2—Dairy Bacteriology—Semester 2. (Aull)

Senior I, Elective: (2 and 4)

Prerequisite: Bacteriology 1.

This course is for students who major in Dairying. The bacteria concerned in the production of milk are emphasized. In the laboratory a careful study of the conditions around the barn and dairy is carried out. Analyses are made of milk, cream, butter, and ice

cream. As far as possible, all the various bacteria found in milk products are isolated and studied in detail. The students prepare their own culture media and stains, and are thus enabled to get a good foundation for future work in bacteriology.

Text-book: Heinemann—"Milk."

BACTERIOLOGY 4—Sanitary Bacteriology—Semester 2. (Aull)

Senior I, III: (2 and 4)

Prerequisite: Bacteriology 1.

This course is designed to meet the needs of those students who specialize in chemistry. A study is made of the location and protection of water supplies, the purification of water, the disposal and purification of sewage, and the isolation of bacteria, particularly pathogenic forms in water.

In the laboratory the students prepare their own media and stains. Bacteriological examinations of water, and sewage are made and a detailed study of the forms found in water and sewage carried out. A careful study is also made of various disinfectants in water purification.

Text-books: Prescott and Winslow's "Elements of Water Bacteriology," "Standard Methods of Water Analysis," and Hazen's "Clean Water and How to Get It," supplemented by lectures and technical papers.

Division Rooms and Equipment

The laboratories and class rooms are located on the first floor of the Agricultural Hall. They contain a good equipment for satisfactory work in botany, forestry, and bacteriology, including sixty compound microscopes, microscope slides, projection apparatus, Spencer rotary microtome, embedding baths, balances, incubators, Arnold, hot air sterilizers, autoclaves, dry ovens. The students have access to a small botanical and bacteriological library.

CHEMISTRY

Professor Brackett

Professor Mitchell

Professor Lippincott

Associate Professor Pollard

Assistant Professor Bender

Assistant Professor Murphy

Instructor Myers

CHEMISTRY 1, 2—General Chemistry—Semesters 1 and 2
(Pollard and Murphy)

Freshmen I, IX. (4 and 2)

Sophomores V, VI, VII, VIII: (2 and 2)

An introduction to chemistry, including the preparation and properties of the common substances, together with the consideration of the fundamental principles of chemical theory. Lecture experiments and laboratory exercises supplement the class work.

Text-books: Holmes' "General Chemistry."; Holmes' "Laboratory Manual of General Chemistry."

CHEMISTRY 1a, 2a.—General Chemistry—Semesters 1 and 2
(Pollard)

Freshmen XIII, III: (3 and 4)

This course is essentially the same as Course 1, 2 above with the addition of extra laboratory practice. The class and laboratory work is arranged to suit the students who are taking the four year Chemistry Course.

Text-books: See Course 1, 2.

CHEMISTRY 1b, 2b—General Chemistry—Semester (1 and 2)
(Pollard and Murphy)

Sophomores V, VI, VII, VIII: (2 and 2)

Similar to Chemistry 1, 2 but especially adapted to Engineering students. Stress is placed on the phases of Chemistry of special interest and importance to students who expect to take up Engineering courses.

CHEMISTRY 3.—Qualitative Analysis—Semester 1 (Lippincott)
Sophomores III: (6 and 10)

Prerequisites: Chemistry 1, 2, or 1a, 2a.

The properties and reactions of metallic elements and of the common inorganic and organic acids, also the qualitative analysis of a number of solutions and solid mixtures. Part of the time is set aside for theoretical work, during which time special attention is paid to the theory of electrolytic dissociation and the law of mass action.

Text-book: A. A. Noyes' "Qualitative Chemical Analysis."

CHEMISTRY 3a, 4 —Quantitative Chemistry—Semester 2,
(Lippincott)

Sophomore III: (0 and 10)

Junior I. (Elective): Semester 1 and 2 (0 and 2.)

Prerequisites: Chemistry 1, 2. or 1a, 2a.

*Absent on leave to study.

The lectures and laboratory instruction are designed to prepare students to understand the mathematical relations, and the fundamental laws of chemistry, and to illustrate the principles involved in both gravimetric and volumetric methods used in elementary analysis.

Text-book: Mahin's "Quantitative Analysis."

CHEMISTRY 5, 6 —Organic Chemistry—Semesters 1 and 2.
(Lippincott)

Sophomore III, IX, XIII: (2 and 2)

Junior I. Elective: (2 and 2)

Prerequisites: Chemistry 1, 2, or 1a, 2a.

A study during the first semester of the underlying principles of organic chemistry; the more common saturated and unsaturated aliphatic hydrocarbons; alcohols and their derivatives and aldehydes and ketones.

The second semester is devoted to the study of amines, polyatomic alcohols; hydroxyacids; carbohydrates; proteins; benzene and some of its homologues and a few of the more important dyes.

The laboratory course involves the preparation and purification of compounds selected from the fatty and aromatic series for the illustration of important synthetic reactions.

Text-books: Remsen and Orndorff "Organic Chemistry"; W. R. Orndorff—"Laboratory Manual of Organic Chemistry."

CHEMISTRY 7, 8 —Physical Chemistry—Semesters 1 and 2.
(Lippincott)

Junior III: (3 and 4)

Prerequisites: Chemistry 1, 2. or 1a, 2a.

A systematic presentation of modern chemical theory in which special attention is paid to the following topics:—gases, liquids, and solids; the theory of solutions; reaction velocity, catalysis and chemical equilibrium; the Phase Rule; colloid chemistry; thermochemistry and elementary electro-chemistry.

The laboratory work involves qualitative and quantitative experiments illustrating the principles of physical chemistry and including practice in performing physical chemical measurements. An important feature of this course is the presentation of detailed reports based upon data obtained in the laboratory.

Text-books: Bigelow's "Physical Chemistry" and Brigg's "Laboratory Outlines in "Physical Chemistry."

CHEMISTRY 9 —Quantitative Chemistry—Semester 1 (Mitchell)

Junior III: (0 and 4)

Prerequisite: Chemistry 4.

A continuation of Chemistry involving the analysis of limestone, clay, silicates and the products of some important industrial and metallurgical operations as coal, pig iron, steel, etc. Electrolytic methods and separations.

Text-books: Mahin's "Quantitative Analysis" and other standard reference books.

CHEMISTRY 10.—Gas and Fuel Analysis—Semester 2. (Lippincott)

Junior III: (Elective) (0 and 2)

Prerequisite: Chemistry 4.

This course consists in the analysis of various gases, and mixtures of gases, such as coal gas, flue gas, natural gas, air and others. Also the analysis of various fuels.

CHEMISTRY 11, 12 —Organic Chemistry—Semester 1, (Semester 2, Elective.) (Lippincott).

Junior III. (2 and 2)

Prerequisites: Chemistry 5, 6.

A review and extension of chemistry 5, 6, the greater portion of time being given to the study of aromatic compounds.

The laboratory work is more advanced and the greater portion of the time will be devoted to quantitative organic analysis.

Text-book: Perkin and Kipping, "Organic Chemistry."

CHEMISTRY 13, 14 —Agricultural Chemistry—Semesters 1 and 2 (Brackett)

Junior I: (2 and 0, except Group C for semester 1).

Prerequisites: Chemistry 1, 2.

This course is devoted to a study of the composition of plants and a discussion of the sources from which the plant derives its constituent elements.

Text-books: Phillips' "Fundamentals of Organic and Biological Chemistry."; Hart and Tottingham's "General Agricultural Chemistry."

CHEMISTRY 16 —Metallurgy—Semester 2, Elective. (Brackett)

Junior III: (4 and 0)

Prerequisites: Chemistry 1, 2.

Physical properties of metals; testing metals; refractories and fluxes; combustion and thermal measurements; fuels; ore dressing; furnaces and accessories; iron ores and metallurgy of iron and steel; copper ores and smelting, extraction and refining of copper; lead ores and metallurgy, and refining of lead; zinc ores and metallurgy of zinc; gold and silver; alloys, their nature and preparation and uses.

Text-books: Wysor's "Metallurgy."; Notes on alloys.

CHEMISTRY 17—History of Chemistry—Semester 1 (Brackett)

Seniors I (Elective), III, IV: (2 and 0)

Prerequisites: Chemistry 1, 2-5, 6.

The study of the development of the science of chemistry from the earliest times to the present day.

Text-book: Moore's "History of Chemistry."

CHEMISTRY 18—Stoichiometry—Semester 2. (Mitchell).

Senior I (Elective) and III: (2 and 0)

Prerequisites: Chemistry 1, 2.

A study of chemical equations, the various kinds in use with their meaning and value; different ways of balancing equations, calculations of various kinds involved in chemistry.

Text-book: Ashley's "General Calculations."

CHEMISTRY 19, 20—Colloid Chemistry—Semesters 1 and 2.

(Pollard)

Senior III.

Prerequisite: Physical chemistry.

The general theory of colloid chemistry, with some of its applications in industrial chemistry, dying, photography, ceramics, soils, biology, food, etc.

Text-book: Bancroft "Applied Colloid Chemistry."

CHEMISTRY 21, 22—Inorganic Chemistry—Semesters 1 and 2.

(Brackett)

Senior I (Elective), III: (2 and 0)

Prerequisite: Chemistry 1 and 2.

A review, extension and continuation of chemistry 1, with special reference to the laws and theories of chemistry, and a study of some of the rarer substances.

Text-book:

CHEMISTRY 23, 24—Technical Analysis-Thesis—Semesters 1 and 2 (Mitchell)

Senior III: Semester 1 (0 and 8); Semester 2 (0 and 8)

Senior I. (Elective): Semesters 1 and 2 (0 and 6)

Prerequisite: Chemistry 4.

The analysis of commercial fertilizers, feeding material, waters, oils, etc. The latter part of the course is devoted to thesis work.

Text-book: Methods of the Association of Official Agricultural Chemists; standard reference books on quantitative analysis.

CHEMISTRY 26—Selected Topics in Chemistry—Semester 2 (Brackett)

Senior I (Elective), III (4 and 0).

Selected topics in inorganic, organic, industrial, agricultural and Sanitary chemistry, to suit the needs of the student.

CHEMISTRY 28.—Advanced Laboratory Practice—Semester 2.

Senior I. (Elective), III (0-4-8). (Mitchell).

Advanced laboratory practice inorganic, organic, agricultural, and sanitary, to suit the needs of the student.

Building and Equipment

Two brick buildings, each about 80 by 50 feet with two stories and a basement, connected on both floors by glass enclosed passages, are devoted to the work of this department. These buildings are steam heated, electrically lighted and well ventilated.

The south building is used almost entirely for academic work. On the first floor are six rooms: a physical chemistry laboratory, a balance room, a qualitative analysis laboratory, for sophomores, a laboratory for organic preparations and analyses for juniors and seniors, an Experiment Station Laboratory, and a small stock room communicating directly with the main stock room in the basement below. On the second floor of this building are three rooms: a laboratory for general chemistry for freshmen and sophomores beginning chemistry, a laboratory of quantitative analysis for juniors and seniors with an adjoining balance room. The laboratories throughout this building are equipped with suitable work tables and hoods fitted with water and gas connections. The basement of this building is divided into a stock room, a storage room and a room for the air pump mixer of the gasoline gas machine which supplies the building.

The north building serves partly for academic and partly for the analytical work of the Fertilizer Analysis Division of the Public State Work of the college. The first floor of this building is all given up to the latter work. There are nine rooms on this floor: one is used as the Director's office; one as a laboratory for water analysis and miscellaneous analytical work; one is used for nitrogen determinations in connection with fertilizer inspection analysis and experiment station work, and adjoining this room is a small room used as an office and balance room by the chemist of the fertilizer control; of the five rooms on the other side of the wide hall extending the full length of the building four are devoted to analysis of fertilizers, two of them being equipped as laboratories for the determination of phosphoric acid, potash and one equipped for either extraction and distillation in connection with the work of experiment station and the analysis of calcium arsenate; one being used as a balance room, and the last as a store room, for fertilizer samples. The laboratories for fertilizer analysis are well equipped for carrying on efficiently a large amount of work simultaneously. The phosphoric acid room has, in addition to the usual equipment, a stirring machine operated by motor for use in volumetric determinations. The potash room contains an electric drying oven. The ammonia laboratory is

equipped with a Durion Kjeldahl digestion apparatus and has facilities for carrying on forty-four digestions and forty-four distillations at the same time, using the Kjeldahl method. On the second floor of this building there are six rooms: two are used as lecture or class rooms, one of which can accommodate about 150 students and the other 49; one room is used as a preparation room in connection with lecture experiments; one is fitted for electrochemical work; one is used as a chemical library, and an adjoining room as a reading room. The library contains several hundred volumes of standard books, which are partly card indexed according to the most modern system, and the reading room a dozen or more journals devoted to chemistry. The library also contains many valuable pamphlets and bulletins. Both the library and reading room are open to students as well as to members of the Department and to the College Faculty. The basement of this building contains four rooms, one of which is a safe deposit vault for storage of records and other things of value. One of the other three rooms is use as a class room; one for the distillation of water; in one is installed the gas plants, which supply this building and this room is also used as a stock room; and and electrically operated Wiley Mills for grinding feeds etc. is also installed in this room, and the remaining room is used as an assay laboratory.

ing and this room is also used as a stock room; and the remaining room is used as an assay laboratory.

In addition to the apparatus and chemicals usually found in all well equipped laboratories for qualitative and quantitative analysis, the quantitative laboratory for Juniors and Seniors contains an electric drying oven, and a stirring machine for volumetric phosphoric acid determination, and a motor to run the machine, and also equipment for Kjeldahl nitrogen determinations; the laboratory for physical chemistry is now equipped for the conduct of the experiments in connection with the course as now offered.

CIVIL ENGINEERING

Professor Clarke

Assistant Professor Glenn

Instructor Blandford

CIVIL ENGINEERING 1, 2—Surveying—Semesters 1 and 2.
(Clarke)

Sophomore V. (2 and 4)

Prerequisites: Mathematics 3, 4.

This course is designed to give the student a considerable facility in the theory and use of modern surveying instruments and methods,

including the platting of notes for maps and profiles.

Text-book: Breed and Hosmer's "Principles and Practice of Surveying."

CIVIL ENGINEERING 3, 4—Surveying—Semesters 1 and 2.

(Glenn, Blandford)

Sophomore VI, VII, VIII, Elective IX. (1 and 2)

Prerequisites: Mathematics 3, 4.

This course covers only the more simple and fundamental theory and use of the tape, transit, and level.

Text-book: Breed and Hosmer's "Principles and Practice of Surveying".

CIVIL ENGINEERING 5—Railroad Curves and Earthwork—Semester 1. (Clarke)

Junior V. (3 and 0)

Prerequisites: Civil Engineering 1, 2.

This course covers the theory and solution of problems involving simple, compound and reverse curves; and the special modifications thereof in the use of frogs. Special attention is given to the spiral transition from tangent to curve. The setting of slope-stakes and various problems of computation of earthwork from cross sections and also from contours, are thoroughly covered in this course.

Text-book: Allen's "Railroad Curves and Earthwork."

CIVIL ENGINEERING 7-8—Railroad Location—Semester (1 and 2) (Clarke)

Junior V. (0 and 4)

Prerequisite: Civil Engineering 5.

This course is designed to put in actual practice the theoretical principles covered during the first semester in civil engineering 5. An actual railroad survey is made between two prescribed termini, covering reconnaissance, preliminary survey, and location; the final line is run in with all curves spiraled: the grade is fixed, slope-stakes set and the amount of earthwork and total cost of construction computed.

CIVIL ENGINEERING 10—Strength of Materials—Semester 2.

(Kayanaugh)

Junior II, V. (3 and 0)

Prerequisite: Mechanical Engineering 3.

A study of the various building and structural materials as regards stresses in riveted joints, beams and columns. Particular reference to be given to the analysis of the various stresses in all types of beams.

Text-book: Boyd's Strength of Materials."

CIVIL ENGINEERING 12—Graphic Static—Semester 2 (Glenn)
Junior II, V. (1 and 2)

Prerequisite: Mechanical Engineering 3.

A study of the principles of graphic analysis, application of these principles to the determination of stresses in roof and bridge trusses, portals, bents, girders, the three-hinged arch, etc. This course is designed to cover all the common problems of structural design solved by graphics.

Text-book: Malcolm's "Graphic Statics."

CIVIL ENGINEERING 14—Structural Design—Semester 2.
(Glenn)

Junior V. (0 and 4)

Prerequisite: Mechanical Engineering 1, 2.

This course is devoted for the first half of the semester to a thorough study of built-up sections, riveting, and the design of details; such as joints, bracing, latticing, supports, etc. The second half is devoted entirely to the detail design of either a plate or deck girder.

Text-Book: Ketchum's "Design of Highway Bridges of Steel, Timber and Concrete.

CIVIL ENGINEERING 16—Bridge Design—Semester 2 (Glenn)
Senior V. (2 and 2)

Prerequisites: Civil Engineering 10, 12, 14.

This course is designed to give the student a general knowledge of the field of bridge engineering along with the practice of working out actual designs. This is accomplished by means of a series of lectures, supplemented by the design by each student of both a concrete and a steel bridge.

Text-Book: Ketchum's "Design of Highway Bridges of Steel, Timber and Concrete.

CIVIL ENGINEERING 17—Hydraulics—Semester 1. (Clarke)
Senior V. (2 and 0)

Prerequisite: Mathematics 6, 7.

A course covering the principles of the flow of water, with particular reference to the need of knowledge thereof in connection with the study of water supply systems and sewerage.

Text-book: Daugherty's "Hydraulics."

CIVIL ENGINEERING 18—Hydraulics—Semester 2. (Kavanaugh)
Senior IV, VI, VII. (2 and 0).

Prerequisite: Mathematics 6, 7.

A general course in the fundamental principles governing the flow of water through orifices, weirs, pipes and channels.

Text-book: Daugherty's "Hydraulics."

CIVIL ENGINEERING 19—Strength of Materials—Semester 1
(Kavanaugh)

Senior VI, VII. (3 and 0)

Prerequisite: Mechanical Engineering 1, 2.

This course is a study of the various building and structural materials and includes; stresses, tension, compression, shear, torsion, riveted joints, beams, and columns. Experimental results are used to illustrate the applications to the actual building in the field.

Text-book: Boyd's "Strength of Materials."

CIVIL ENGINEERING 21—Masonry Construction—Semester 1.
(Clarke).

Senior V. (2 and 0)

Prerequisite: Civil Engineering 10, 12.

While this course gives consideration to all kinds of masonry, the most particular attention is directed toward the use of concrete, both plain and reinforced. The subject of foundations is taken up in detail, and the methods used in improving the bearing power of weak soils. Discussion is made of the fundamental principles of design applying to dams, retaining walls, bridge abutments and piers, and arches.

Text-book: Baker's "Masonry Construction."

CIVIL ENGINEERING 23—Roads and Pavements—Semester 1.
(Glenn)

Senior V. (3 and 0)

Prerequisites: Civil Engineering 7, 8.

This course consists of a thorough investigation into the merits and disadvantages of all different types and methods of highway construction, from dirt roads up to the highest type of hard surfaced pavement. The details of construction are covered in full, in order in so far as possible to fit the student to enter at once into the highway improvement which at this time engages so much public attention. In addition to the general problem of highway construction, this course also gives attention to the problems of grade and drainage of streets, which especially confront the municipal engineer. Students in this course must also take civil engineering 31, 32.

Text-book: Agg's "Roads and Pavements."

CIVIL ENGINEERING 24—Water Supply—Semester 2. (Clarke)
Senior V. (3 and 0)

Prerequisites: Civil Engineering 7, 8, 10, 12, 17.

A course devoted to the engineering procedure necessary to determine the quantity and quality of various sources of water supply; and the method used to improve the quality of unpotable waters;

and the construction of works for the collection of water, and works for the distribution of water.

Text-book: Turneure and Russell's "Public Water Supplies."

CIVIL ENGINEERING 26—Sewerage and Sewage Disposal—Semester 2. (Clarke)

Senior V. (3 and 0)

Prerequisites: Civil Engineering 7, 8, 10, 12, 17.

A very specific course covering all the points of theory and practice involved in the construction of a modern sewerage system, and the various methods employed to dispose of sewage in accordance with sanitary law.

Text-book: Babbitt's "Sewerage and Sewage Treatment."

CIVIL ENGINEERING 28—Engineering Relations—Semester 2. (Clarke)

Senior V. (1 and 0)

This course covers the general principles of law and ethics involved in the relations of the engineer as principal, agent, or client; and the fundamental legal features involved in the writing of contracts and specifications.

Text-book: Allen's "Business Law for Engineers."

CIVIL ENGINEERING 30—Engineering Investigations and Design—Semester 2. (Clarke).

Senior V. (0 and 4)

Prerequisites: Civil Engineering 21, 23, and registration in C. E. 24, 26.

This is a practical course in conjunction with the theoretical work given during the senior year and gives actual experience in the performance of the necessary investigations and design of structures in all those branches. In masonry; borings are made to ascertain foundations, and designs are made of bridge masonry and arches. In water-supply; a stream is gauged and rated, and the necessary surveys and designs are made for collecting, storage and distributing works. In sewerage; a field survey and actual design are made for a sewerage system for some neighboring town.

Inspection trips away from the college are planned as circumstances favor.

CIVIL ENGINEERING 31, 32 —Road Materials Testing Laboratory—Semesters 1 and 2. (Glenn)

Senior V. (0 and 3)

Prerequisites: Civil Engineering 10, and registration or credit in C. E. 23.

In this course the student performs in the laboratory the standard tests of all materials used in highway construction.

This includes tests and analyses of top-soil, bituminous materials, Portland cement, sand, stone, brick, steel, wood, drain-tile, concrete, etc. The latter part of the course is devoted to the actual design, preparation and testing of concrete and bituminous paving mixes, and instruction in the field tests of materials to regulate their quality.

This course in conjunction with civil engineering 23 is designed to fit the student for practical work in the highway engineering field. Text book; Barton and Doane's "Sampling and Testing of Highway Materials."

CIVIL ENGINEERING 34—Thesis—Semester 2. (Clarke).

Senior V. (0 and 2)

Every senior, prior to graduation, is required to prepare and submit a thesis. This may be either an original theoretical investigation; or an actual design similar to the work done in courses 16, 20, 31, and 32. The time allotted to this subject represents merely the time devoted thereto under the direct supervision of the instructor. The student is expected to put in much additional individual work.

Division Rooms and Equipment.

The collection of field instruments contains the following:

Two complete transits with solar attachments; six engineer's transits; four railroad compasses; two six-inch vernier compasses; one precise level; three twenty inch wye levels; four dumpy levels; two architect's levels; one convertible architect's level; one drainage level; six Locke hand levels; one binocular hand level; two stadia hand levels, with a supply of self-reading and target rods; two complete plane tables; a Price current meter, with steel boat and truck; sextant; aneroid barometer; flag poles; tapes; chains and all necessary accessories.

The office equipment includes planimeter, slide rules, drafting instruments, and a universal drafting machine.

The road materials laboratory contains full and complete equipment for testing stone, sand, cement, brick, all bituminous materials and top-soil. This equipment includes a Deval abrasion machine; Dorry hardness machine; Page impact machine; diamond drill and saw with grinding lap; ball grinding mill; briquette-making machines for cementation and tension tests; impact cementation machine; brick rattler; 100,000 pound Olsen universal testing machine for testing stone, brick, cement mortars and concrete in compression; moisture closet; mixing tables; steam bath apparatus; Vicat apparatus; Le Chatelier apparatus; Fairbanks tension briquette testing machine; cement, sand, and stone sieves; Ro-tap shaker; Dullin Rotarex extractor; New York Laboratory type penetrometer; ductility machine; Engler viscosimeter; Freas electric oven; dehydration and distillation apparatus for both

tars and asphalts; analytical balance; flash and burning point apparatus; ring and ball apparatus; float test apparatus; hydrometers; pycnometers; balances; and all necessary accessories.

The college owns a concrete mixer which is also in the custody of the road materials laboratory, and is used for practical instruction in mixing and placing concrete.

The laboratory for the testing of materials of construction contains the following principal items of equipment: one 100,000 pound Olsen automatic universal vertical testing machine, electrically driven, and designed to test materials in tension, compression, and shear; one 3,000 pound transverse testing machine for determination of the flexural strength of short beams; one 60,000 pound Olsen torsion testing machine; one compression micrometer; one Duplex micrometer extensometer; one deflection instrument and torsion meter.

DAIRY HUSBANDRY

Professor LaMaster

Associate Professor Goodale

DAIRYING 2—Milk Products, Production and Manufacture—Semester 2. (Goodale)

Junior 1: (2 and 2)

The object of this course is to give the student a knowledge of the production, care and testing of milk and its products; also the Management and feeding of dairy cattle.

Text-book: "Productive Dairying"—Washburn.

DAIRYING 4—Dairy Cattle Judging—Semester 2. (LaMaster)

Junior I (Elective): (0 and 2)

A study of the breeds, type and characteristics of dairy cattle with practice in judging and selection of animals for production and exhibition.

DAIRYING 5, 6—Dairy Manufacturing—Semester 1 and 2. (Goodale)

Senior 1: Semester 1 (2 and 2) Semester 2 (2 and 4)

Prerequisite: Dairying 2.

This course deals with the problems of market milk and the intensive study of the manufacture of butter, cheese and ice cream.

Text-books: "Principles and Practice of Buttermaking" McKay and Larsen, "The Book of Cheese"—Thom and Fisk, "The Book of Ice Cream"—Fisk.

DAIRYING 7—Creamery Organization and Management—Semester 1 (Goodale)

Senior 1: (3 and 0) Elective

Prerequisite: Dairying 2.

A thorough study of the organization and operations of commercial creameries, creamery accounting, and marketing of dairy products.

Text-book: "Management of Dairy Plants"—Mortensen

DAIRYING 9—Dairy Cattle Feeding and Management—Semester 1 (LaMaster)

Senior 1: (2 and 2) Elective.

Prerequisite: Dairying 2.

This course is an advanced study of feeds, care, management and development of dairy cattle and methods of milk production.

Text-book: "Dairy Cattle and Milk Production"—Eckles.

DAIRYING 10—Dairy Cattle Breeding—Semester 2 (LaMaster)

Senior 1: (1 and 2) Elective.

Prerequisites: Dairying 2 and Agronomy 5.

A study of the practical application of the principles of genetics in its relation to dairy cattle breeding. This will be followed by an extensive study of the leading families and individuals of the major dairy breeds.

Text-book: To be selected.

DAIRYING 12—Advanced Dairy Farming—Semester 2 (LaMaster)

Senior 1: (2 and 2). Elective.

Prerequisite: Dairying 2.

A study of dairy herds based on milk and feeding records, dairy farming and its relation to soil fertility, and dairy farm management. An advanced course in dairy farming.

Text-book: "Dairy Cattle Feeding and Management"—Larson and Putney.

Division Rooms and Equipment

The live stock consists of a large herd of registered Jersey cattle, registered Holstein-Friesians, and registered Guernseys.

These cattle are housed in a splendid modern dairy barn with a capacity of one hundred and twenty cows. This barn has the most sanitary equipment throughout.

The dairy laboratories are equipped for milk testing, separator demonstrations, butter making, etc.

The Clemson College Creamery has complete equipment for the making of butter, cheese and ice cream and the cooling and the pasteurization of milk. This creamery is in continuous operation for the entire year, and offers exceptional advantages to students who wish to fit themselves for commercial creamery and ice cream work.

DRAWING

Professor Lee

Associate Professor Klugh

Instructors Harris and Siegler

DRAWING 1—Freehand Drawing—Semester 1. (Harris)

Freshman I, III, IX, XIII. (0 and 2.)

The course is designed, primarily, to assist the student where drawing is needed in his work in agricultural subjects. Proportion and detail are stressed. The course consists in full-sized, enlarged and reduced drawings of irregular shaped objects and in outlining and shading of geometrical figures.

DRAWING 3—Freehand Drawing—Semester 1. (Siegler)

Freshman II. (0 and 2).

This course is the same as the first semester of drawing 5.

DRAWING 5, 6 —Freehand Drawing—Semesters 1 and 2. (Harris and Siegler)

Freshman V, VI, VII, VIII, XI. (0 and 2).

A course, designed to meet the needs of the engineer, who must express himself in the clearest and quickest way to workmen under his charge.

During the first semester the student gets a thorough drill in the principles of perspective. The second semester is devoted to drawing machine parts, particular attention being given to the development of the imagination.

The first semester is prerequisite to the second.

DRAWING 8—Mechanical Drawing—Semester 2. (Klugh and Harris)

Freshman I, III, IX, XIII, (0 and 2)

Lettering, exercises in the uses of instruments, orthographic projection, scale drawings from the text; design of a small farm building, tracing and blue printing.

Text-book: French and Ives' "Agricultural Drawing."

DRAWING 9, 10 —Mechanical Drawing—Semesters 1 and 2. (Klugh and Harris)

Freshman V, VI, VII, VIII, (0 and 2)

Exercises in the use of instruments and in applied geometry; Reinhardt lettering; conventional use of lines; orthographic projection; scale working drawings from the text; finding other views of objects from given views; working drawings from sketches; working drawings from parts of machines; assembled views from working drawings of parts; tracing; blueprinting.

The first semester is prerequisite to the second.

Text-book: French's "Engineering Drawing."

DRAWING 11—Mechanical Drawing—Semester 1. (Klugh)

Freshman II. (0 and 2)

Same as first semester Drawing 9, drawing of details of buildings.

DRAWING 13—Descriptive Geometry—Semester 1. (Klugh)

Sophomore V, VI, VII, VIII. (0 and 2)

Prerequisites: Drawing 6, 8.

Study and delineation of projections of points, lines, plane surfaces and solids, and their various relations; tangencies, intersections, and developments under normal and sub-normal conditions; original exercises required to illustrate topics under consideration.

Text-book: Smiths "Practical Descriptive Geometry."

DRAWING 14—Mechanical Drawing—Semester 2. (Klugh)

Sophomore VI, VII, VIII. (0 and 2)

Prerequisites: Drawing 6, 10, 13.

Continuation of work in Drawing 10 in orthographic projection; intersection and development problems, showing relation of plan and elevation to developed surfaces, isometric and perspective drawing; working drawings from machines or parts of machines from sketches and specifications. Elementary principles of machine design. Tracing and blue printing.

Text-book: French's "Engineering Drawing."

DRAWING 16—Structural Drawing—Semester 2. (Klugh)

Sophomore V. (0 and 2)

Prerequisites: Drawing 6, 10, 13.

Study of structural symbols and elementary structural design. Reading of structural drawings; tracing and blue printing.

Text-book: French's "Engineering Drawing;" Instructor's notes and problems.

DRAWING 17, 18—Machine Design—Semesters 1 and 2. (Klugh)

Junior VI, VII. (0 and 3).

Prerequisite: Drawing 14.

One hour each week is devoted to the study of the theory of spur, bevel, and screw gearing; lobed and elliptic wheels; epicyclic trains; ratchet motions; link motions; quick return motions; and cam motions. A series of lectures covering some of the practical problems of engineering is given in connection with this course.

Two hours each week are devoted to practical problems illustrating the principles studied, to working drawings in design, and to tracing and blue printing.

Text-books: Keown's "Mechanism", French's "Engineering Drawing."

Rooms and Equipment

The division of architecture and drawing is located on the second and third floors of the engineering building.

On the second floor are several large rooms devoted to free-hand drawing and engineering drafting and design; a locker room; office for the head of the division and three blue print rooms equipped for printing by sun and electricity. A 42-inch Pease automatic printing, washing and drying blue-print machine is installed in one of these rooms. The rooms are equipped with drafting tables, individual lockers, plaster casts, parts of machines useful in design and blue prints.

Each student is required to own a complete outfit of drawing tools, such as a set of instruments, board, T-square, and other material. This outfit must be first-class in every respect, must be approved by the instructor in charge, and no second-hand or inferior tools will be permitted to be used by an engineering student; the agricultural freshman, however, may use the cheaper instruments. Students are incapable of judging drawing instruments and make a mistake in buying low-priced instruments which appear to be of good quality, but are inferior and will not give good service, soon necessitating the purchase of another set. Students are advised to buy these tools at the Cadet Exchange where they can see samples and make selections. On account of the large number of sets of instruments bought by the college each year, a very large discount is obtained and given to the student. The more expensive and less used instruments are kept in the office for the use of students needing them.

ECONOMICS AND SOCIOLOGY

Professor Brearley

ECONOMICS AND SOCIOLOGY 1 —Economics —Semester 1 (Brearley)

All seniors: (2 and 0)

This is an elementary course in descriptive economics and is designed to introduce the student to modern business conditions and practices. Among the topics considered are risk-taking, money, banking, business cycles, foreign trade supply and demand, etc.

Text-book: Clay's "Economics for the General Reader."

ECONOMICS AND SOCIOLOGY 2 —Sociology —Semester 2 (Brearley)

All Seniors: (2 and 0)

This course is a study of the elementary principles of sociology

and of some of the special social problems, considered in the light of general principles.

Text-book: Ellwood's "Sociology and Modern Social Problems."

ECONOMICS AND SOCIOLOGY 3, 4—Psychology—Semester 1 and 2 (Brearley)

Elective: All courses (2 and 0)

An introductory course in general psychology, emphasizing the study of the nervous system, the psychology of learning, and selected problems in social psychology. This course is especially valuable for students taking advanced work in social science or education.

ECONOMICS AND SOCIOLOGY 6—Introduction to Psychology—Semester 2 (Brearley)

Elective: Seniors, all courses (2 and 0)

This course will endeavor to give a summary of the essentials of elementary psychology. The contributions of psychology to the understanding of "human nature" will be stressed.

EDUCATION

Professor Crandall

Associate Professor Washington

Assistant Professor Ayers

Assistant Professor Tate

Assistant Professor McLean

Undergraduate Courses

Undergraduate courses in Education are offered to aid persons in preparing for the following general types of positions:

- 1.—Teachers of Agriculture.
- 2.—Teachers of Trades and Industries.
- 3.—Teachers of Science, Mathematics, and other high school subjects.
- 4.—Teachers of Shop Work.

The following sequences of courses are planned to train men for these positions:

- Teachers of Agriculture—Agricultural Education 1, 2, 3, 4, 6.
- Teachers of Trades and Industries—Industrial Education 5, 7, 8, 10, 12.
- Teachers of high school subjects—Education 9, 11, 14, 16, 18.
- Teachers of Shop Work—Education 5, 8, 10, 13, 20.

EDUCATION 1—Agricultural Education—Semester 1. (Crandall)
Junior I. Elective; (1 and 4)

The principal purpose of this course is to familiarize students with the work of teachers of Agriculture in local communities. Students observe and report on the work of all-day, part-time, evening and day unit classes; and community and promotional work; equipment and general organization of a program in Agricultural Education for a local community. Students are expected to spend two afternoons each week in the practice departments.

EDUCATION 2—Agricultural Education 2—Educational Psychology
—Semester 2. (Washington)
Junior I. Elective; (2 and 2)

Study of the learning process in terms of situation, bond, response; how to study; effect of attitude, feelings and method on the learning process; how to remember; value of recognition and proper control of instincts in formulating educational programs; habit formation; individual differences as affecting educational and vocational performances; the psychology involved in the interview and in personality as affecting development of teachers as vocational and educational leaders. Special attention is given to the study of mental ability, attitude, interests, and aptitudes of the groups affected by education in its various phases.

EDUCATION 3—Agricultural Education—Semester 1. (Crandall)
Senior 1. Elective; (2 and 4)

In this course emphasis is placed on the participation of students in all possible phases of the work of a teacher of agriculture in a local community. Students participate in organizing and conducting all-day, part-time, evening and day unit classes. Students are held responsible for definite phases of community and promotional work. Instruction in principles and methods of teaching is given in connection with student's participation. Students are expected to spend two afternoons each week in the practice departments.

EDUCATION 4—Agricultural Education—Semester 2. (Crandall, Ayers, McLean)
Senior 1 Elective; (0 and 10)

Each student is required to assume the work and responsibility of a teacher of agriculture in a local community. Students are expected to organize and conduct part time, evening class, and day unit courses in addition to the all-day program. Students are to spend five afternoons each week in the practice departments.

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EDUCATION 5—Industrial Education—Semester 1. (Crandall)
Junior VI, VII, VIII A, (1 and 4)

This is an introductory course required of all students pursuing Industrial Education. The chief purpose of this course is to orient the students in the field of Industrial Education. Special emphasis will be placed on familiarizing the students with the needs for vocational education in trades and industries in South Carolina. Students are expected to spend from one to two afternoons each week in the practic departments and visiting schools and classes in the State

EDUCATION 6—Agricultural Education—Semester 2. (Crandall)
Senior 1. Elective; (3 and 0)

The developing of teaching material in vocational agriculture receives special emphasis in this course. Students are expected to make careful analyses of conditions and practices of farming in a local community as one of the chief sources of subject matter.

EDUCATION 7—Industrial Education—Semester 1. (Washington)
Senior VIII. A. (0 and 10)

Study of educational needs of textile employees, job analysis of certain jobs in cotton mill, study of mill as a whole, construction of courses to be taught in vocaional classes and schools. Students are to spend one full day each week in mills and schools.

EDUCATION 8—Industrial Education—Educational Psychology—
Semester 2. (Washington)
Junior VI, VII, VIII A, (2 and 2)

See Agricultural Education 2—Educational Psychology.

EDUCATION 9—Introduction to Education—Semester 1. (Crandall)
Junior IX. Elective; (1 and 4)

A general introductory course required of all students majoring in Education. This course takes up a survey of the general field of Education for the purpose of giving the student a background for more specialized courses in Education.

EDUCATION 10—Industrial Education—Semester 2. (Crandall)
Senior VI, VII, VIII A, (3 and 0)

Special emphasis is placed in this course on the teaching of problems in the trades and industries in South Carolina. Such topics as the project method of teaching, lesson types, teaching exercises, type studies, and lesson planning are studied in this course.

EDUCATION 11—Special Methods in Teaching High School Subjects—Semester 1. (Washington)

Senior IX. Elective; (2 and 4)

Among the topics to be considered are the objectives of different high school subjects, course building, methods of evaluating instruction in high school subjects, comparative study of text books and laboratory manuals, and the adaptaton of high school courses to local conditions.

EDUCATION 12—Industrial Education—Semester 2. (Crandall Washington and Tate)

Senior VIII A. (0 and 10)

Students who pursue the curriculum in Industrial Education are required to observe and teach in evening and part-time classes in trades and industries. Students are expected to organize part-time, general continuation, and evening classes in addition to the work in connection with the all-day program. Students are to spend five afternoons each week in the practice departments.

EDUCATION 13—Curriculum Building—Semester 1. (Washington)

Senior VI, VII. (3 and 2)

This course is planned for students taking mechanical, electrical or shop courses. It is designed to aid the students in analyzing certain trades with the view of formulating courses of study in those trades.

EDUCATION 14—Educational Psychology—Semester 2. (Washington)

Junior IX. (2 and 2)

See Agricultural Education 2—Educational Psychology.

EDUCATION 16—Principles of Teaching--Semester 2. (Crandall)

Senior IX. Elective; (3 and 0)

This is a course treating of the principles of teaching high school subjects. Such topics as the project method of teaching; lesson types; teaching exercises—recitation, laboratory, supervised study, demonstration, field trip; examinations; type studies; and lesson planning, are studied in this course.

EDUCATION 18 —Practice Teaching—Semester 2. (Crandall and Washington)

Senior IX. Elective; (0 and 10)

This course is required of all students in General Science who elect a major in Education. Students in General Science observe and teach in high school departments in public schools located near the College.

EDUCATION 20—Industrial Education—Semester 2. (Washington)

Senior VI, VII. (0 and 10)

See Education 12—Industrial Education.

Graduate Courses

Graduate courses are offered in Education to aid persons preparing for or engaged in the following types of positions:

1. Teachers, principals, and superintendents of public schools.
2. Instructors in colleges and universities.
3. Teachers of agriculture.
4. County superintendents and other people interested in administrative and supervisory work.
5. Teachers of trades and industries.

EDUCATION 201—Advanced Educational Psychology—Semester 1.
(Washington)
(3 and 0)

Prerequisite: Education 5.

The following topics will be discussed: Instincts, reasoning, imitation, suggestion, motivation, drill work, transfer of training, and the physiological aspects of psychology.

EDUCATION 202—Statistical Methods Applied to Education—Semester 2. (Crandall)
(3 and 0)

The statistical methods commonly applied in the interpretation of educational data are studied in this course.

EDUCATION 203—Tests and Measurements—Semester 1. (Washington)
(3 and 0)

This course will include a general survey of the scope and purpose of intelligence and educational tests. In addition to furnishing experience in the use of tests, the following topics will be studied: Construction of tests, quality of scales, derived scores, improving examinations, statistical methods, uses of tests in vocational and educational guidance.

EDUCATION 204—Principles of Teaching—Semester 2. (Crandall)
(3 and 0)

Prerequisite: Education 7.

The fundamental aims of good teaching, the problem-project method of teaching, job analysis as an aid in teaching, and the technique of teaching involved in the solution of a problem are some of the topics treated in this course.

EDUCATION 205—Secondary Education—Semester 1. (Crandall)
(3 and 0)

The aims of secondary education, secondary-school population, curricula of the secondary schools, and the junior high school are among the topics considered in this course.

EDUCATION 206—Public School Administration and Supervision
Semester 2. (Washington)
(3 and 0)

The public school district and its limitations; the county units of school administration and supervision; the possibility of the natural community in administering and supervising public education; the authority and function of the state in administering and supervising public education; factors affecting consolidation; participation of the Federal government in public education; methods of financing public schools; bases of distributing public school funds, are the topics discussed in this course.

EDUCATION 207—High School Administration—Semester 1. (Crandall)
(3 and 0)

High school superintendents and principals should find this a profitable course. Among the topics to be considered are the school plant including buildings, supplies, and equipment; the teaching corps its selection, supervision, promotion and dismissal; curricula and courses of study; the program of studies; classification and promotion of pupils; guidance of pupils; extra-curricular activities; administration and supervision of mental and educational tests; records and reports; and accrediting high school work.

EDUCATION 208—Seminar. (Crandall and Washington)

Credit hours are to be determined by the work done by the student.

Seminars may be arranged by students for graduate work in special phases of Education.

ELECTRICAL ENGINEERING

Professor Dargan

Professor Rhodes

Instructor Wilson

ELECTRICAL ENGINEERING 1—Electrical Engineering—Semester 1. (Rhodes and Wilson)
Juniors VI, VII. (3 and 3)

Prerequisites: Mathematics 6; Physics 5, 6.

A study of electric and magnetic circuits, including fundamental laws for both direct and alternating current and the construction, operation and standard methods of testing electrical measuring instruments.

Text-book: Dawes' "Electrical Engineering," Vol. I.

ELECTRICAL ENGINEERING 2—Electrical Engineering—Semester 2. (Rhodes and Wilson)

Junior VI, VII. (3 and 3)

Prerequisite: Electrical Engineering 1.

A continuation of electrical engineering 1 with an introduction to direct current generators and motors.

Text-book: Dawes' "Electrical Engineering," Vols. I and II.

ELECTRICAL ENGINEERING 3—Electrical Engineering—Semester 1. (Dargan).

Senior VI. (5 and 4)

Prerequisites: Electrical Engineering 2, Mathematics 7, Mechanical Engineering 1, 2.

A study of direct and alternating current dynamos and equipments including fundamental laws, construction, operation and testing.

Text-books: Dawes' "Electrical Engineering," Vols. I and II, Christie's "Electrical Engineering." Bulletins and reference books.

ELECTRICAL ENGINEERING 4—Electrical Engineering—Semester 2. (Dargan and Wilson)

Senior VI. (5 and 5)

Prerequisite: Electrical Engineering 3.

A continuation of electrical engineering 3 with a brief introduction to the study of generation, transmission, distribution and utilization of electrical energy.

Text-books: Same as for electrical engineering 3.

ELECTRICAL ENGINEERING 5—Electrical Engineering—Semester 1. (Dargan and Rhodes)

Senior VII. (3 and 2)

Prerequisites: Electrical Engineering 2, Mathematics 7, Mechanical Engineering 1, 2

Similar to electrical engineering 3, but arranged for mechanical engineering students.

Text-books: Dawes' "Electrical Engineering," Vols. I and II.

ELECTRICAL ENGINEERING 6—Electrical Engineering—Semester 2. (Dargan and Rhodes)

Senior VII. (3 and 2)

Prerequisite: Electrical Engineering 5.

Similar to electrical engineering 4, but arranged for mechanical engineering students.

Text-books: Dawes' "Electrical Engineering" Vol. II.

ELECTRICAL ENGINEERING 7—Electrical Engineering—Semester 1. (Wilson)

Senior III, V, VIII, VIII(a), (2 and 2)

Prerequisites: Mathematics 6; Physics 5, 6

A brief course covering fundamental principles and tests of the more important electrical equipment and applications.

Text-book: Gray's "Principles and Practice of Electrical Engineering."

ELECTRICAL ENGINEERING 9—Design—Semester 1. (Rhodes).

Senior VII. (0 and 2)

Prerequisites: Drawing 18; Electrical Engineering 2.

An analytical and graphical study of the principles of construction of electrical machinery through a series of problems in design. Students in this subject must also take electrical engineering 5.

Text-book: Gray's "Electrical Machine Design."

ELECTRICAL ENGINEERING 10—Design—Semester 2. (Rhodes)

Senior VI. (0 and 2)

Prerequisites: Electrical Engineering 3; Drawing 2.

Similar to electrical engineering 8 but arranged for electrical engineering students. Students in this subject must also take electrical engineering 4.

Text-book: Gray's "Electrical Machine Design".

Division Rooms and Equipment.

Electrical Instrument Laboratory. The electrical division occupies two single-story brick buildings and includes in its equipment the following instruments and apparatus: Leeds and Northrup potentiometer, with certified standard resistances for measuring both current and potential; Kelvin deka-ampere balance; Weston laboratory standard voltmeter with multipliers; two motor-generator sets; three small motors; fourteen galvanometers; fifteen standard resistance sets; three standard resistance and Wheatstone bridge sets; dial decade standard test set; four meter-wire bridges; four standard condensers; commercial condensers: Weston standard cells; ammeters; voltmeters; rheostats; key switches; storage cells; primary cells, and other miscellaneous apparatus; also a quantity of special apparatus made in the college shops and laboratories.

Dynamo Laboratory. The lecture room has raised seats, and is equipped with instruments, illustration models, and other demonstration apparatus.

This laboratory equipment includes the following:

Voltmeters: twelve Weston, six General Electric Co. Thomson, one Jewell, one Whitney, one Ayrton and Perry, one Hoyt, one Kelvin electrostatic, one Cardew.

Ammeters: Eight Weston, six Weston millivoltmeters with current shunts, twelve General Electric Co. Thomson, one General Electric Co. hot wire, one Westinghouse portable, one Siemens electro-dynamometer, one Jewell.

Wattmeters: Six Weston indicating, five General Electric Co. Thomson indicating, four General Electric Co. Thomson watt-hour meters, one General Electric Co., one Fort Wayne and one Westinghouse induction watt-hour meters.

Miscellaneous Instruments: Tachometers, speed counters, stop watches, current and potential transformers for instruments, frequency meters, etc

Direct Current Dynamos: One 17 kw Lundell, one 15 kw. Mather, one 2.5 kw. Crocker-Wheeler, three 2 kw Kester, one 15 hp. Kester, one 10 hp Kester, two arc light generators, one 4 hp. Westinghouse, one 25 hp. General Electric Co., one 1 kw. General Electric Co., one 7 1-2 kw. Westinghouse.

Alternating Current Apparatus: One 15 kva. General Electric Company single, two, three and six phase revolving field generator, complete with marble switch board and full set of indicating instruments; one 7 1-2 kva. General Electric Company single, two and three phase rotary converter; two 15 kva revolving field synchronous alternators, also one squirrel cage rotor with starting compensator and one phase wound rotor with drum controller and resistor; five General Electric Company single, two and three phase induction motors; one Wagner three phase induction motor; one Wagner repulsion induction motor; three 3 kva and three 5 kva constant potential transformers; one constant current transformer; two 5 kva Scott transformers; General Electric Company condensers and assortment of coils, models, etc.

Miscellaneous: 3-ton portable crane, prony brake, rheostats, drum controllers, circuit breakers, switches, fuse testing apparatus, lightning arresters; etc.

ENGLISH

Professor Daniel

Professor Bradley

Assistant Professor Lane

Instructors—Moffatt, Kinard, Rankin, Epting

ENGLISH 1, 2—Composition and American Literature—Semesters 1 and 2. Lane, Moffatt, Kinard, Setzler.

Freshman: All courses: (3 and 0)

This course, while it presupposes a knowledge of English grammar and syntax, gives a review of the subject and, in addition, a course in composition and rhetoric, embracing punctuation, the sentence, diction, and letter writing. Students are taught the use of dictionaries, encyclopedias, and other reference books.

American Literature. One period a week is given to the study of American literature. The historic development, the influences that gave distinctive characteristics to the literature of each period, the lives of the chief writers, a critical study of selections from each and a class-room reading of many other selections make up the principal work of the course.

Supplementary Reading. A supplementary reading course embracing some of the best works of the leading American authors is required, and written reports are made upon these. Every effort is made to inspire the student with a love for good literature, and special inducements are offered to those who do reading in addition to that required.

Text-books: "Composition for College Students"—Thomas, Manchester, Scott; "Century Handbook of Writing"—"Three Centuries of American Poetry and Prose"—Newcomer-Andrews-Hall; Webster's "Secondary School Dictionary" or a book of higher grade; and ten or more selections from American Literature.

ENGLISH 3, 4—Rhetoric and English Literature—Semesters 1 and 2. (Bradley, Lane and Kinard)

Sophomore: All courses: (3 and 0)

Prerequisites: English 1, 2.

The work of the first semester comprises a study of the whole composition, the development of the paragraph, a review of punctuation, and a careful study of the grammatical and rhetorical construction of the sentences. The work of the second semester takes up the consideration of the kinds of writing, giving special attention

to exposition and description. Many of the themes are discussed in class, and consultations are held with students for individual discussion.

Text-books: "English Composition"—Greenough and Hersey; "Century Handbook of Writing."

Two periods a week throughout the session.

English Literature. The work in English literature comprises a general historic survey of English literature from the Anglo-Saxon period to the Victorian Age. It makes a class-room study of one or more selections from representative authors of each period, and requires parallel reading from other writers. The selections—made from ballads, different forms of poetry, the drama, prose fiction, and the essay—illustrate the stages of the development of the literature. Parallel readings are assigned on which both oral and written reports are required.

Text-books: "Twelve Centuries of English Poetry and Prose" by Newcomer and Andrews; Long's "English Literature"; Webster's "Secondary School Dictionary" or one of higher grade.

One period a week throughout the session.

ENGLISH 5, 6—Technical Writing, Public Speaking, Argumentation—Semesters 1 and 2—(Daniel and Bradley).

Junior: All courses: (2 and 0)

Prerequisites: English 3, 4.

Technical Writing—(Bradley)—A text-book on technical writing is used as a foundation and guide for the work. Students are required to make reports on experiments, to submit plans for construction, to draw specifications and contracts, and to make reports of investigations. Specimens of technical writing are analyzed and studied as models.

Text-books: "Technical Exposition" Thompson, "Century Handbook of Writing;" Webster's "Secondary School Dictionary."

One period a week for first and second semesters.

Public Speaking—(Daniel)—In this course in public speaking a text-book is used for a study of the theory of the subject, but most of the work is practical, stressing correct pronunciation, clear enunciation, and direct natural delivery. Selections are memorized for practice. Original speeches are prepared and delivered. Extemporaneous speaking is required.

Text-book: "The Fundamentals of Speech"—Woolbert.

One period a week for the first semester.

Argumentation—(Daniel)—In the course in argumentation instruction is given in selecting, stating, and defining questions for debate, in securing and testing evidence, in making briefs, and in presenting the argument. Models are used for guidance, but original briefs and arguments are required.

Text-book: Foster's "Argumentation and Debating."

One period a week for the second semester.

ENGLISH 7, 8—Journalism, Dramatic Literature—Semesters 1 and 2. (Daniel)

Senior: Elective: (2 and 0)

Prerequisites: English 5, 6

Journalism: Text-books are used as the basis of the course in Journalism which is designed to train students in the preparation of technical articles for the general reader and to help those who expect to become leaders in industrial and economic life to do occasional writing for newspapers and other publications.

Text-books: "Special Feature Articles"—Bleyer; "Newspaper Editing and Writing"—Bleyer.

Two periods a week for the first semester.

Dramatic Literature. The course in dramatic literature gives a brief survey of the development of the drama followed by a study of some of Shakespeare's plays and a modern play. Some time is also devoted to a study of present day literature. Occasional papers are required.

Text-books: To be selected.

Two periods a week for the second semester.

ENGLISH 11—Business Law—Semester 1. (Daniel)

Junior: Non R. O. T. C. (2 and 0)

The course in business law seeks to fix legal principles in the student's mind, to lead him to realize the limitations of the legal knowledge of the layman, to give definite ideas as to how laws operate in actual practice, to prepare him to carry on business transactions with such care that he may avoid legal difficulties.

The course begins with a brief survey of the origin, purpose and development of laws; then takes up a study of contracts, sales, agency, negotiable instruments, partnership, corporations, personal, property, and real property.

Problems from actual cases are discussed in class, the students taking opposing sides. Contracts, notes, mortgages, checks and other papers are written and discussed.

Text-book: "Business Law"—Conyington-Bergh

GEOLOGY AND MINERALOGY

Professor Calhoun.

GEOLOGY 1, 2—Agricultural Geology—Semesters 1 and 2. (Calhoun).

Sophomore I: Semester 1 (3 and 0); Semester 2 (0 and 2)

In this course geology is considered in its practical relation to agriculture. The student becomes familiar with the soil-making rocks and minerals, the influence of the various mineral constituents in rocks on the texture of soil, the natural mineral fertilizers,

and the formation of soils from rocks. The question of the relation of underground water to wells, springs, artesian wells, to drainage problems, and to soil water is studied. The classes of soils derived from rivers, wind action, and glacier deposits are taken up. The principles and methods of making soil maps are explained. Topographical and geological maps are studied chiefly with reference to agricultural problems.

Text-book: "Agricultural Geology"—Emerson

GEOLOGY 3—Engineering Geology—Semester 1. (Calhoun)

Junior V: (2 and 0)

A brief course in which the practical application of geology to engineering is emphasized. Topographical and geological maps are used in connection with the text book.

Text-book: "Elements of Engineering Geology"—Ries and Watson.

GEOLOGY 5, 6—Chemical Geology—Semesters 1 and 2. (Calhoun)

Senior III: (2 and 0)

In this course structural geology, the theory of ore deposits, and the economic side of geology are emphasized. Special stress is laid upon the action of underground water in forming ores and veins. The theories of the formation of various classes of rocks are considered and special attention is given to that side of historical geology which enables the chemists to recognize certain horizons which carry minerals and ores of economic importance.

Text-book: "Elements of Engineering Geology"—Ries and Watson.

GEOLOGY 7, 8—Mineralogy—Semesters 1 and 2. (Calhoun)

Junior III, Senior I, IX, Elective: (2 and 2)

A comprehensive course in crystallography, physical, and chemical mineralogy, and systematic, descriptive and determinative mineralogy. Crystallography is taught by lectures and text book, with laboratory work based on the collection of models and natural crystals; also physical, optical, and chemical properties of minerals, and descriptive mineralogy covering the more important species. Much of the laboratory work is devoted to the determination of minerals by means of their physical and chemical properties, by comparison with labeled specimens of the systematic collection, and by the use of unlabeled collections for practice in identifying minerals at sight. This course gives a sufficient knowledge of mineralogy for the geologist, metallurgist, mining engineer, or chemist and will enable the student to identify readily all but the rarer minerals.

Text-book: "Mineralogy"—Moses and Parson.

GEOLOGY 10—Meteorology—Semester 2. (Calhoun)

Senior I, IX, Elective: (2 and 0)

Junior, All Courses Non R. O. T. C. (2 and 0)

A course designed to give the student an adequate conception of the use of meteorological instruments, weather maps, and the general principles of meteorology and climatology as applied to the growing of crops.

Text-book: "Agricultural Meteorology"—Smith.

Division Rooms and Equipment

The Division of Geology and Mineralogy occupies three rooms on the second floor of the Agricultural Building.

The systematic collections contain about 500 labeled specimens of rocks, minerals, and fossils. These are exhibited in the laboratory, and are available to students and the public. There is also an unlabeled collection of minerals for practice in identifying species at sight, and unlabeled collections of the most important minerals are provided for determinative work in the laboratory.

The laboratory is supplied with water, gas and all apparatus and reagents necessary for the determination of minerals by means of their chemical and physical properties.

The class room is supplied with large physical wall maps of the world and of all continents, an 18-inch terrestrial globe, a 20-inch relief globe, a set of geological and geographical relief models, and lantern slides, stereographs, and photographs.

HISTORY

Professor Holmes

HISTORY 1—American Government—Semester 1—(Holmes, Brearley and Epting)

Freshman: All Courses: (3 and 0)

This course presupposes familiarity with the elementary principles of civics as given in the high schools.

The course develops the historical background of our government, traces the growth of the Constitution, describes the actual workings of the various elements of our government, and gives special attention to the defects of our system and to suggested remedies.

A supplementary reading course embracing the standard works on American government is required, and written reports are made upon these.

Text-book: Munro's "The Government of United States."
(new edition)

HISTORY 2—Modern and Contemporary History—Semester 2—
(Holmes, Brearley and Epting)

Freshman: All courses: (3 and 0)

This course requires an intensive study of European history during the nineteenth and twentieth centuries. Emphasis is laid on the social and economic changes, on the development of nationalism and democracy, on economic imperialism, on the causes and results of the World War and on world relations.

A feature of the course is the assignment of simple problems to students, who are required to find sources of material and to make written or oral reports of their reading.

Text-book: Schapiro's "Modern and Contemporary European History."

HISTORY 3—American Economic History—Semesters (1 and 2)
(Holmes)

Freshman: General Science Course: (3 and 0)

This course develops the economic back-ground of Colonization, the Revolution, the Constitution, wars, public lands, agriculture and industry.

Text-book: To be selected.

HORTICULTURE

Professor Newman

Assistant Professor Hoffman

HORTICULTURE 1—Fruit Growing—Semester 1... (Hoffmann)

Junior 1: (2 and 2).

General study of fruits with particular reference to the home orchard sites, soils, propagation, planting, pruning, spraying, and varieties.

Text-book: "Productive Orchardng"—Sears

Required equipment—One pair hand pruning shears and 1 budding knife.

HORTICULTURE 2.—Vegetable Gardening—Semester 2. (Hoffmann)

Junior 1: (1 and 2.)

Principles and practices relative to the production of vegetables for home use. Construction and management of cold frames and hotbeds. Practical work in planting and caring for a garden.

Text-book: "Vegetable Gardening"—Watts.

HORTICULTURE 3—Systematic Pomology and Small Fruits—
Semester 1. (Hoffmann)

Senior I, Elective: (2 and 2)

Systematic Pomology—1st half 1st semester.

Small Fruits—2nd half 1st semester.

Systematic includes the classification, description, and nomenclature of native and sub-tropical fruits; identification with reference to relationship and natural classification of varieties and judging and displaying fruits.

Text-book: "Systematic Pomology"—Hendrick

Small Fruits includes the propagation, culture, harvesting, and marketing of the blackberry, dewberry, grape, raspberry, strawberry, and other small fruits.

Text-book: "Productive Small Fruit Culture"—Sears.

HORTICULTURE 4—Commercial Pomology—Semester 2. (Hoffmann)

Senior I. Elective: (2 and 2)

Commercial Pomology will deal with practical problems pertaining to fruit growing; establishment and management of large commercial orchards, inter-cropping, cover crops, marketing, etc. Commercial orchards visited.

Textbook: "Textbook of Pomology"—Gourley.

Supplimented by lectures and assigned readings.

Required equipment: One pair pruning shears, saw, and budding knife.

HORTICULTURE 6—Landscape Gardening—Semester 2 (Newman)

Senior 1 Elective: (2 and 2)

A study of the principles of landscape art with reference to the improvement of home and school grounds and park areas. Mapping, designing and a study of decorative plants, their identification and adaptation to landscape work.

HORTICULTURE 7, 8—Truck and Market Gardening—Semester 1 and 2 (Hoffmann)

Senior 1 Elective: (2 and 2)

Principles and practices of commercial vegetable growing on a large scale as well as forcing crops in the greenhouse and in frames. Special attention is given to the trucking practices in this State, with particular reference to the development and management of truck farms and market gardens, planting, cultivation, fertilization, harvesting, grading, and marketing. This course combines both systematic and commercial study. Commercial sections visited.

Text-book: "Vegetable Forcing"—Watts.

(To be adopted later)

Supplimented by lectures and assigned readings.

HORTICULTURE 9 —Plant Propagation and Nursery Management
—Semester 1. (Newman)

Senior 1 Elective: (2 and 2)

This course includes the study of methods of propagating fruit trees, shrubs and the various kinds of flowering plants. The student is given practical instruction in the propagation of these plants in the field as well as in the greenhouse. The nursery consists of plantings of various kinds of deciduous and evergreen shrubs as well as the pome and stone fruits.

Text-book: "The Nursery Manual"—Bailey.

HORTICULTURE 10 —Thesis.—Semesters 1 and 2.

Senior 1.

Special subject requiring independent investigations by students specializing in Horticulture. Results submitted in written form.

Division Rooms and Equipment

The division is well equipped with orchards, greenhouses, gardens, and vineyards. The facilities for instructional purposes include ample lecture rooms laboratories, and practice workhouses thereby making it possible for the division to offer students excellent opportunities for pursuing a course in Horticulture.

MATHEMATICS

Professor Martin

Professor Shanklin

Associate Professor Hunter

Assistant Professor Johnstone

Instructor Reed

Instructor Fitzpatrick

MATHEMATICS 1—Plane Trigonometry—Semester 1—(Shanklin)

Freshman: I, IX, Elective: (3 and 0)

Prerequisite: Algebra through quadratics, Plane Geometry.

This course covers plane trigonometry.

Text-book: Crenshaw and Derr, "Plane Trigonometry".

MATHEMATICS 2—Mathematics for Agriculture and General science—Semester 2. (Shanklin)

Freshman: I, IX, Elective:

Prerequisite: Mathematics 1.

This course embraces the study of graphical representations of statistical data, statistics, small errors, conic sections, empirical equations, progressions, annuities, averages and correlations.

Text-book: "Mathematics for Agriculture and General Science"—Kenyon and Lovitt.

MATHEMATICS 3—Plane Trigonometry—Semester 1—(Reed, Fitzpatrick, Johnstone)

Freshman: II, V, VI, VII, VIII: (5 and 0)

Prerequisite: Algebra through quadratics, Plane Geometry.

This course covers plane trigonometry, supplemented by numerous related problems and exercises.

Text-book: Crenshaw and Derr, "Plane Trigonometry".

MATHEMATICS 4—College Algebra—Semester 2—(Martin, Reed, Fitzpatrick, Hunter, Johnstone)

This course embraces a thorough drill in advanced algebra with especial emphasis on the subjects which come up in the subsequent courses in mathematics.

Text-book: Fite's "College Algebra."

MATHEMATICS 5—Analytic Geometry—Semester 1. (Martin, Johnstone, Hunter)

Sophomores: II, III, V, VI, VII, VIII, IX: (4 and 0)

Prerequisite: Mathematics 3, 4.

This course comprises a study of cartesian and polar systems of coordinates, discussion and construction of loci, the straight line, transformation of coordinates, the circle, parabola, ellipse, hyperbola, general equation of second degree involving two variables, tangents and normals, higher plane curves, equation of the plane, the straight line in space, and surfaces of the second order.

Text-book: "Analytic Geometry"—Wilson and Tracy.

MATHEMATICS 6—Differential Calculus—Semester 2—(Martin, Johnstone, Hunter)

Sophomores: II, III, V, VI, VII, VIII, IX: (4 and 0)

Prerequisite: Mathematics 5.

A study of the differentiation of algebraic and transcendental functions, successive differentiation and development of functions, functions of two variables, tangents, normals, and asymptotes, applications of the derivative in mechanics.

Text-book: "Differential and Integral Calculus"—Osborne.

MATHEMATICS 7—Integral Calculus—Semester 1. (Martin, Hunter).

Juniors: II, IV, V, VII, VIII, IX Elective: (3 and 0).

Prerequisite: Mathematics 6.

This course in integral calculus gives instruction in elementary forms of integration, integration of rational fractions, the definite integral, successive reductions, integration of functions of two variables, geometric applications, multiple integrals, and practical problems arising in engineering subjects.

Text-book: "Differential and Integral Calculus"—Osborne.

MECHANICAL ENGINEERING

Professor Earle

Professor Kavanaugh

Associate Professor Carpenter

Associate Professor Shubert

Instructor Freeman

MECHANICAL ENGINEERING 1, 2—Mechanics—Semesters 1 and 2. (Kavanaugh)

Junior VI, VII, IX. (Elective): (3 and 0)

Prerequisites: Mathematics 6; Physics 5, 6.

The subjects taught are composition and resolution of forces; solution of force systems; couples; centeroids and centers of gravity; friction; moment of inertia; rectilinear motion; curvilinear motion; rotation; combined translation and rotation; work and energy; impulse, momentum, impact.

Text-book: Hancock's "Applied Mechanics for Engineers," revised and rewritten by N. C. Riggs.

MERCHANICAL ENGINEERING 3—Merchanics—Semester 1—(Kavanaugh)

Junior II, V: (3 and 0)

Mathematics 6; Physics 1, 2.

This course is similar to mechanical engineering 1, 2, but is arranged to suit the needs of students in courses II and V, and precedes strength of materials and graphic statics.

MECHANICAL ENGINEERING 4—Mechanical Engineering—Semester 2. (Carpenter, Shubert and Freeman)

Junior V, VI, VII, VIII: (3 and 2)

Prerequisite: Mathematics 7

A general survey of the field of power engineering, taking up the essentials for the production of power, and the principles governing the action of various mechanical motors, and the comparison of their performance. Steam power includes fuels, combustion, theory of steam generation, boilers, boiler auxiliaries, steam turbines, auxiliaries for steam engines and turbines and the testing of steam power equipment. Gas power includes a study of internal combustion engines together with their fuels, gas producers and various auxiliaries connected with internal combustion engine power plants.

Application of steam and gas power to locomotives, automobiles, trucks and tractors.

Introductory to mechanical engineering and embracing, (a) the study of calibration of leading types of instruments and apparatus used in mechanical engineering, and (b) elementary tests of materials and machinery.

Text-books: Potter and Calderwood's "Elements of Steam and Gas Power Engineering." Moyer's "Power Plant Testing."

MECHANICAL ENGINEERING 5, 6—Mechanical Engineering—
Semesters 1 and 2. (Earle and Freeman).

Senior VII: Semester 1 (5 and 4), Semester 2 (5 and 5)

Prerequisite: Mechanical Engineering 4.

First semester: Thermodynamics of gasses, steam, etc. In this is taken up heat and heat power plants, laws of gasses; expansion and compression, entropy, gas and vapor cycles, properties of steam power, efficiency and performance of engines, both theoretical and actual, and methods of increasing the efficiency of the actual steam engine; steam engine parts, and types of steam engine governors, valve gears of steam engine, indicator diagrams for both simple and compound engines, performance of steam engine.

Second semester: Thorough study of steam turbines, including design; external and internal combustion engines, fuels, combustion, boilers, superheaters, draft and draft apparatus, utilization of waste heat, heat transfer, gas producers, producer gas, feed water heaters, condensers and auxiliaries; purification of water, power plants, compressed air, refrigeration. During the whole course many problems covering principles involved are worked out. A graded series of experiments upon the quality of lubricants, strength of engineering materials, and operating characteristics of representative types of steam, internal combustion, and hydraulic machinery. During the second semester a number of elaborate and highly technical experimental problems are undertaken, problems of special interest to the mechanical engineer.

Text-books: Hirshfield and Barnard's "Elements of Heat Power Engineering." Moyer's "Power Plant Testing."

MECHANICAL ENGINEERING 7, 8—Mechanical Engineering—
Semesters 1 and 2. (Earle, Carpenter and Freeman).

Senior VI: (3 and 2)

Prerequisite: Mechanical Engineering 4.

First semester: Study of thermodynamics of gasses, properties of steam, entropy, valve gears, indicators, losses in engines, compound engines, superheated steam and its application, steam jackets, and injectors.

Second semester: Condensers feed water heaters, governors, turning efforts on crank shaft, fly wheel design, study of details of en-

gines, balancing of engines, performance of engines, locomotives, steam turbines, their application of design, refrigeration, and ice plants, power plant auxiliaries.

Laboratory similar to that given in mechanical engineering 5, 6.

Text-books: Ripper's "Steam Engine, Theory and Practice." Moyer's "Power Plant Testing."

MECHANICAL ENGINEERING 9, 10—Mechanical Engineering—

Semester 1. (Earle, Carpenter and Freeman).

Senior V: Semester 1 (3 and 2).

Prerequisite: Mechanical Engineering 4.

This course is very similar to mechanical engineering 4 except that the laboratory work is curtailed and suited more to the needs of the civil engineer.

Laboratory similar to that given in mechanical engineering 5, 6.

Text-books: Ripper's "Steam Engine, Theory and Practice." Moyer's "Power Plant Testing."

MECHANICAL ENGINEERING 11—Mechanical Engineering—

Semester 1. (Earle, Carpenter and Freeman).

Senior VIII; (3 and 2)

Prerequisite: Mechanical Engineering 4.

This course is designed to briefly cover the fundamentals of mechanical engineering most necessary for the textile and chemical engineer to know. The course is somewhat similar to mechanical engineering 7, 8, but shorter.

Text-books: Ripper's "Steam Engine, Theory and Practice." Moyer's "Power Plant Testing."

MECHANICAL ENGINEERING 13—Design—Semester 1: (Carpenter)

Senior VI: (0 and 2)

Prerequisites; Drawing 18, Mechanical Engineering 4.

This course is similar to mechanical engineering but briefer and especially arranged for electrical engineering students.

MECHANICAL ENGINEERING 14—Design—Semester 2. (Carpenter)

Senior VII: (0 and 2)

Prerequisites: Drawing 18; Mechanical Engineering 4.

An analytical and graphical study of the fundamental principles of construction of various classes of certain machinery such as the steam engine, pumps, steam turbines, etc., by the solution of certain problems in design.

Division Rooms and Equipment

The laboratory is situated on the ground floor of the engineering building, and occupies a room 37 feet by 108 feet, and a room 37 feet by 50 feet, and contains the following equipment:

For Steam Engineering.—One 15 hp. horizontal locomotive type boiler; one 6 hp. Erie, plain slide valve steam engine, throttling governor; one 5 vertical engine built by students; one 15 hp. Payne high speed automatic cut off engine; one 40 hp. McEwen engine designed to give very close regulation of speed; one Corliss cross compound engine, arranged to run either condensing or noncondensing and with either or both cylinders with high pressure steam; one 7 kw. Curtis steam turbine non-condensing, direct connected to a two pole interpole direct current compounded generator, with necessary switchboard and instruments; one Wheeler surface condenser, with combined air and circulating pumps; one separately fired Foster superheater; one set steam gauge testing apparatus; one Carpenter's separating calorimeter; two Carpenter's throttling calorimeters; six steam engine indicators of various makes; four injectors; two draft gauges; seven steam gauges.

For Hydraulic Engineering —One DeLaval centrifugal pump 100 g. p. m. against 100 feet head; one power triplex pump; one Pelton water motor; one hydraulic ram; three duplex pumps of different makes; one gear pump; two weirs; two hook guages; one complete Mueller outfit for testing water meters.

For Compressed Air —One Clayton air compressor, water jacketed; one improved air motor; one Sirroco blower direct connected to D. C. variable speed motor.

For Fuel and Lubricants.—One Carpenter's coal calorimeter with scales, balances and oxygen generating device; one standard viscosimeter; one Thurston friction tester; one Saybolt (U. S. Standard) viscosimeter; one open flash and fire tester; one Emerson bomb coal calorimeter with adiabatic jacket.

For Gas Engines.—One 5hp. Otto gasoline engine; one 7 hp. Alamo gasoline engine, and Delco outfit, one 3 hp. Meitz and Weiss oil engine, one 25 hp. Fairbanks Morse oil engine, type Y, and two 6 cylinders Continental auto engines, one connected to a 75 hp. General Electric Co. electric dynamometer and the other to a water brake.

Miscellaneous —One 6 hp. transmission dynamometer, graduated to read horse-power direct and built by students; eight platform scales; four spring balances; seven mercury thermometers; one electrical resistance thermometer; two Bristol thermo-couples for reading temperatures to 2,000 and 2,900 degrees respectively; planimeters. All apparatus is so arranged that it may be used for separate or combined tests. Besides the apparatus in this room, the apparatus in the power station, pumping station and refrigeration plant are available for instruction and tests. For lists of equipment see description of buildings.

MILITARY DEPARTMENT

Lieut. Colonel Cole, Professor

Captain Lee, Assistant Professor

Captain Higgins, Assistant Professor

Captain Penrose, Assistant Professor

Lieut. Johnson, Assistant Professor

Lieut. Balcar, Assistant Professor

MILITARY SCIENCE 1, 2.—Military Science and Tactics,

Freshman Class. All courses: (1 and 2)

Infantry drill regulations; Close and extended order; Ceremonies.

Rifle Marksmanship; Nomenclature and care of rifle; Gallery practice; Range practice.

Military Hygiene and First Aid.

Physical Training: Setting-up exercises; Mass games; Mass athletics.

Military Courtesy: Principles of military discipline; the Military Courtesies of the Army of the United States.

MILITARY SCIENCE 3, 4.—Military Science and Tactics.

Sophomore Class, all courses, (1 and 2).

Infantry Weapons: The automatic rifle.

Musketry: Weapons of the Infantry squad; range estimation; fire discipline; fire control; control of movements; conduct of fire in the attack and the defense; combat practice

Interior Guard Duty: Duties of officers, Non commissioned officers and privates of the guard.

Command and Leadership: Exercise of command appropriate to non-commissioned officers.

MILITARY SCIENCE 5, 6.—Military Science and Tactics—Semesters 1 and 2.

Junior Class R. O. T. C. 1st Semester (2 and 3) 2nd Semester (3 and 2).

Map Reading and Military Sketching: Visibility problems, reading of maps, making of maps.

Field Engineering: Trenches, obstacles, shelters, machine gun emplacements, observation post; working parties, concealment and camouflage.

Infantry Weapons: The machine gun.

Military Law and Rules of Land Warfare; definition; sources

and kinds military jurisdiction; classification and composition of courts; exercise of military jurisdiction; persons subject to military law; articles of war explained; procedure before trial; procedure of Courts-Martial; evidence; sentences; punishment without trial; rules of land warfare; moot court exercises.

Command and Leadership: Exercise of Command appropriate to grade of Sergeant and Lieutenant.

Infantry Drill Regulations: The Battalion and the Regiment.

MILITARY SCIENCE, 5a, 6a—Military Science and Tactics—Semester 1 and 2,

Junior Class, non-R. O. T. C. (0 and 3).

Same as Course 5, 6 but covering only three-fifths of the work.

MILITARY SCIENCE, 7, 8—Military Science and Tactics—Semester 1 and 2.

Senior Class R. O. T. C., First Semester (2 and 3); Second Semester, (3 and 2).

Combat Principles: General view of the organization and conduct of the Battalion and higher units; principles governing the organization; armament, equipment, and conduct of the rifle, machine gun, Howitzer and Headquarters Companies in offensive and defensive combat; tactical principles governing the conduct of the platoon and large units in offensive and defensive combat; principles the employment and details of the conduct of covering detachments in open and position warfare; exercises and problems on sand table, map and terrain

Infantry Weapons: 37 Millimeter (one pounders); the light mortar.

Military History: American Military History including the World War; the sources of authority for our military establishment; development of the military resources; the state of National preparedness for war at a critical period in the history of the United States; the cost of American Wars in relation to National unpreparedness.

Administration: Preparation of papers pertaining to the administration of a company.

Command and Leadership—Exercise of command appropriate to the grades of Lieutenant to Major.

Pistol Markmanship.

MILITARY SCIENCE 7a, 8a—Military Science and Tactics—Semester 1 and 2.

Senior Class, Non-R. O. T. C. (0 and 3)

Same as course 7, 8 but covering only about three-fifths of the work

MODERN LANGUAGES

GERMAN 1, 2.—(Lippincott)

Junior Class; Course IX, (Elective)

The essentials of German grammar; collateral reading; **conversation.**

Text-book: Bacon's "New German Grammar."

Course IX: Three periods a week throughout the session.

GERMAN 3, 4.—(Lippincott)

Senior Class; Courses IX (Elective)

German prose composition; study of German words and idioms; German-English cognates; translation of literary and scientific German; conversation.

Text-books: Bacon's "German Composition," Manley-Carl Schurdtz's "Lebenserinnerungen," Gerstaecker's "Germelshausen," Wallentin's "Grundzuge der Naturlehre," or texts of equal difficulty.

Three periods a week throughout the session.

FRENCH I—(Aull)

Junior Class: Course IX. (Elective)

The essentials of French grammar; collateral reading; translation of easy French prose; French prose composition.

Three periods a week throughout the session.

FRENCH II—(Aull)

Senior Class: Course IX (Elective)

French syntax; French verbs; French idioms and prepositions; translation of literary and scientific French.

Text-books: Cortina's French Method; De Nonvert's La Belle France; Herdler's Scientific Reader.

Two periods a week throughout the session

SPANISH I (Aull)

Junior Class: Course IX (Elective)

This course is an introduction to the Spanish language consisting of drill in grammar, translation from Spanish into English and from English into Spanish, and conversation. Emphasis is laid on pronunciation, accent, and idiom.

Text-books: "A Spanish Grammar" by Hills and Ford, and "A Spanish Reader" by Bransby.

Three periods a week throughout the session.

SPANISH II—(Aull)

Senior Class: Course IX (Elective)

This is a continuation of Spanish—I with the addition of more reading and conversation. It takes up also a study of pamphlets, bulletins and books concerning the Latin-American countries, especially from an industrial and commercial point of view.

Text-books: The same as in Course I and a Spanish newspaper.

Two periods a week throughout the session.

PHYSICS

Professor Godfrey

Assistant Professor Phebus

Instructors Davis and Reed

PHYSICS 1, 2.—General Physics—Semesters 1 and 2.—(Phebus, Davis and Reed).

Freshman: II, V, VI, VII, VIII: (2 and 2).

Prerequisite: Entrance mathematics: Entrance physics 1 unit.

This is an introductory course in general physics for engineering students. Its object is to make the student familiar with the fundamental principles of physics and to lay the foundation for subsequent work. Mechanics, heat, light, electricity, and magnetism are studied with emphasis upon the problem work. In the laboratory elementary quantitative experiments in these subjects are assigned. Mimeographed notes are used, and such accuracy as the conditions permit is insisted upon so that the student may acquire some idea of modern experimental methods. The curve plotting method of showing results is taught.

Text-book: "Concise Physics."—Hoyt.

PHYSICS 3, 4—Principles of Physics—Semesters 1 and 2. (Phebus)

Sophomore: I, III, IX: (2 and 2)

Prerequisite: Mathematics 1, 2.

This is a general course in college physics arranged particularly to meet the needs of students in agriculture and chemistry. The physical laws in mechanics, heat, light, electricity, and magnetism are studied with reference to their application in these courses. Particular attention is given to the properties of matter and to the principles of operation and adjustment of instruments used in later work in physical chemistry and agriculture. Directions for the experiments assigned are given in mimeographed notes.

Text-book: "The Elements of Applied Physics"—Smith.

PHYSICS 5, 6—College Physics—Semesters 1 and 2. (Godfrey)

Sophomore: V, VI, VII: (3 and 0)

Prerequisite: Physics 1, 2, and Mathematics 3, .

This course is a continuation of physics 1, 2 for engineering students. Lectures with demonstrations are given covering the fundamental principles given in the text, and the assigned problems are chosen with special reference to the application of physical laws in engineering work. The course covers the subject matter of the text.

Text-book: "College Physics"—Kimball.

PHYSICS 7, 8—Laboratory Physics—Semesters 1 and 2 (Godfrey and Phebus)**Sophomore: V, VI, VII, VIII: (0 and 2.)****Prerequisite:** Physics 1, 2, and Mathematics 3,

This work includes careful quantitative measurements in mechanics, heat, light, electricity, and magnetism. It is the equivalent to that described in the average college manual of physical measurements. The student is required to understand the fundamental principles involved in the experiments and to show by his results some skill in physical manipulation and careful method in the calculations required. In much of the work he is thrown upon his own resources and expected to develop some confidence in the correctness of his work. The report includes some discussion of the limitations of the method used and its accuracy. This course is concurrent with Physics 5, 6.

Text-book: Mimeographed notes.**PHYSICS 9, 10—General Physics—(Godfrey and Phebus).****Sophomore: IX: (3 and 2)**

Students making preparation to enter a medical college and those desiring a general course in college physics are required to take this course. All the topics given in the text are studied, and the laboratory work has been prepared to cover all these topics.

Text-book: "Physics"—Stewart.**PHYSICS 10, 11—Advanced Physics—(Godfrey and Phebus)****Junior and Senior: IX, (Elective): (2 and 2)****Prerequisite:** Physics 9, 10.

This course is for students specializing in Physics on topics selected to suit the plans of the students taking it for either advanced engineering or graduate work in science. A careful study of only a few topics is attempted. Projects in molecular physics, vectorial mechanics, thermodynamics, radiation, and electro-magnetic waves are suggested. Special facilities are available for experiments with spark discharge, damped and undamped electric waves and various types of oscillating circuits.

PHYSICS 12, 13—Principles of Physics—(Godfrey and Phebus)**Junior and Senior: IX: (Elective) (2 and 2)****Prerequisite:** Physics 9, 10.

Students intending to teach are given a course covering the fundamentals of general Physics with suggestions regarding methods of presentation and demonstration, organization of laboratory work, and objects to be sought in teaching elementary physics or general science. The laboratory work is a continuation of the sophomore course with more advanced experiments. A wide choice of experi-

ments is given so that the course, while primarily intended for teachers, is also suited to the needs of students in general science not intending to teach.

PHYSICS 14—Elementary Descriptive Astronomy—Semester 2.
—(Godfrey).

Junior: V: (0 and 2)

Prerequisite: Physics 5, 6 and Mathematics 5, 6.

This is a brief course in general astronomy arranged with special reference to the work of civil engineers. The motions of the heavenly bodies are studied and some time is given to the general facts of descriptive astronomy.

Text-book: "Practical Astronomy"—Hasmer.

Division Rooms and Equipment.

The Physics Division is located on the ground floor of the Chapel Building. The two lecture rooms, each seating eighty-four students, are equipped with individual tablet arm chairs on a stepped floor and supplied with projection equipment. There are three large laboratories, a dark room, an instrument room, storage room, and Division office room. The lecture rooms and laboratories are equipped with reinforced concrete tables on concrete foundation. They are supplied with gas, water, and air pipe lines throughout and have electrical connection with switchboard in battery and generator room. The division is provided with a great variety of apparatus for both lecture and laboratory purposes, to which additions are made each year.

SHOP WORK

Associate Professor Shubert

Associate Professor Marshall

Associate Professor Johnson

SHOP WORK 1, 2—Forge Work—Semesters 1 and 2. (Freeman)
Freshman V, VI, VII, VIII: (0 and 2)

This course embraces all the fundamental principles of forge work, such as, drawing out, upsetting, bending, shouldering, punching and welding in iron and mild steel.

During the first semester the work is done in wrought iron and mild steel and each exercise is carefully explained and demonstrated by the instructor, with full discussion by student and teacher.

The second semester is devoted to tool making and tempering steel. Special lectures are given on the manufacture and handling of iron and tool steel, and with emphasis on making, grinding and polishing tools.

Each student is supplied with working drawings and a complete outfit for doing the work on the plan that is found in any good commercial plant

SHOP WORK 3—Forge Work—Semester 1.—(Johnson)

Freshman II: (0 and 2)

This course is identical with shop work 1 for the first semester.

SHOP WORK 5, 6—Forge Work—Semesters 1 and 2.—(Johnson)

Freshman I, III, IX: (0 and 2)

This course is identical with shop work 1 for the first semester. During the second semester, the work is more directly related to the upkeep of a farm is given, such as repairs on machinery and farm equipment, special attention being given to welding and brazing in the open fire.

SHOP WORK 7, 8—Foundry—Semesters 1 and 2.—(Johnson)

Sophomore VI, VII, VIII: (0 and 2)

This course is designed to give the student a comprehensive idea of the principles of foundry practice, as related to the trades, and the importance of this branch of industry, as to its relation to engineering work.

The first semester is taken up with such things as moulding sands, flasks and the use of the tools used in the trade, various plain moulding from simple patterns, ramming, gating, venting and facing moulds.

The second semester covers the mixing of metals, melting and pouring moulds, core making and its connection with foundry practice, also, notes and talks on the physical and chemical properties of the various ferrous metals. A portion of this time is spent with brass work, dealing with all of the non-ferrous metals.

SHOP WORK 9—Industrial Arts—Semester 1.—(Johnson)

Junior IX. (0 and 2)

Work is given covering the fundamentals underlying foundry practice, such as tempering sand, mixing facings, making dry sand cores, and making iron and brass in green sand.

SHOP WORK 11—Industrial Arts—Semester 1.—(Johnson)

Junior IX. (Elective): (0 and 2)

Prerequisite Shop Work 9.

This course is devoted to the history of foundry practice, the study of cupola construction, mixing metals, classification of patterns, and the methods of handling foundry work in the shop.

Text-book: Wendt's "Foundry Work" supplemented with notes and talks.

SHOP WORK 13, 14—Machine Shop. Semester 1 and 2. (Shubert)

Junior VI, VII, Semester 1. (0 and 5) Semester 2 (0 and 3)

Prerequisite: Shop work 2, 8.

This course begins with chipping, filing, and scraping, which involves the use of the lay-out table, surface gage, center punch, ham-

mer, file, chisel, scraper, surface plate, square, and straight edge, which concludes the term of bench work.

The students then take up the various operations on machine tools, which have been previously demonstrated by the instructor. All measurements of machine tool operations come to very close limits.

In this course the student is given a practical working knowledge of machine shop tools, and of directing machine shop work efficiently. One hour of the weekly period is used by the instructor in demonstrating all operations together with talks on uses and care of precision tools. This is to familiarize the student with the difficulties that arise in his practical machine shop work.

SHOP WORK 15—Machine Shop. Semester 1. (Shubert) .

Junior V; (0 and 3)

Prerequisites: Shop work 2, 8

Essentially the same as shop work 13, 14 but less extensive.

SHOP WORK 17, 18—Wood Work—Semesters 1 and 2. (Marshall)

Fresh V, VI, VII, VIII: (0 and 2)

This course includes both bench and lathe work and is designed to familiarize the student with tools and machinery commonly used in wood work. The latter part of this course is devoted to the study of the best methods of finishing.

Text-book: Lefax Note Book.

SHOP WORK 19—Wood Work.—Semester 1.—(Marshall)

Freshman II: (0 and 2)

This course is identical with shop work 17 for the first semester.

SHOP WORK 21, 22—Pattern Making—Semesters 1 and 2. (Marshall)

Sophomore VI, VII: (0 and 2)

Prerequisite: Shop work 18.

This course consists of exercises in pattern making with special reference to the principles involved. It is planned to outline to the student a general survey of the most suitable materials, the special tools, and the fundamental processes of the trade, together with the relations of the allied departments—particularly those of the foundry. The student is required to make, from machine drawings, full sized pattern drawings, making the necessary allowances for finish, shrinkage and draft. The course is further illuminated by lectures on the metal trades and the manufacture of iron products, so that the pupil learns exactly what part pattern-making plays in the commercial world.

Text-book: "Wood Pattern Making,"—Marshall.

SHOP WORK 23, 24—Industrial Arts—Semesters 1 and 2. (Marshall)

Junior IX: (Elective) (0 and 2)

This course is designed for students who wish to teach manual training. Special emphasis is laid on good form in the use of wood working tools and machinery. The course is more intensive and more exacting than that required of the regular engineering students.

A proportional part of the course is given to the study and application of the latest and best finishes, including varnishes, stains, enamels, paints and polychrome.

SHOP WORK 25, 26—Industrial Arts—Semesters 1 and 2. (Marshall)

Senior IX: (Elective) (0 and 2)

Prerequisite: Shop work 14.

This course includes lectures and assigned work in advanced cabinet work and pattern making. Some time is given in practice teaching and observation, each student being assigned as assistant in some of the shop classes throughout the entire session.

SHOP WORK 101—Forge Shop—Semester 1. (Freeman)

Two-Year Agr. XII: (0 and 2)

A course devoted to problems encountered in the upkeep of the farm. Exercises in tempering, riveting, plow sharpening, and repairs to farm machinery are given.

Equipment

The **Forge Shop** occupies a room 37 by 98 feet. The equipment is installed under two separate systems. One system consists of 18 Buffalo down-draft forges; 18 Hay Budden anvils equipped with all necessary small tools; a 60-inch exhaust fan; a No. 4 direct-connected pressure blower; a drill press; an emery grinder; a bending cone; a Buffalo iron shear; two swage blocks; a vise and work bench. The other system consists of 18 Sturtevant down-draft forges; 18 Hay Budden anvils thoroughly equipped with small tools; a 60-inch exhaust fan, direct connected; and a blackboard for special drawings.

The **Foundry** occupies a space of 43 by 76 feet, and is free from posts and other obstructions. It is equipped with a 26-inch Victor Colliau's cupola; a No. 7 pressure blower; a Millett core oven; a large Paxon brick core oven; a two-ton post crane; tools for eighteen students; also a case of special tools, a full equipment of hand, bull, and truck ladles, an electric riddle, and a full line of foundry flasks.

The brass foundry is equipped with an 18-inch furnace; a drying stove; clamps, flasks, tongs, and graphite crucibles for making and pouring molds. Also one Ferro-fix brazing machine with full equipment for doing diversified cast iron brazing.

The **Machine Shop** occupies the ground floor and part of the basement of the southwest wing of the engineering building, the main floor being 45 by 100 feet. The equipment consists of the following: suitable benches and vises for chipping, filing, and assembling of machines, one 18-inch by 12 foot engine lathe, one 18 inch by 8 foot engine lathe, eleven 14 inch by 6 foot engine lathes, one 14 inch by 8 foot speed lathe, five direct motor drive 14 inch by 5 foot engine lathes, two universal milling machines, one 22 inch by 6 foot planer, one 14 inch shaper, one 10 inch slotter, one 10 inch by 30 inch universal grinder, one universal tool and cutter grinder, one twist drill grinder, one 18 inch floor grinder, two 9 inch floor grinders, one 36 inch wet floor grinder, one 28 inch vertical drill press, one 18 inch vertical drill press, one power hack saw, one down draft forge equipment, one oil burning tempering furnace, a tool room containing hand tools, gages and fixtures.

The **Wood Shop** division consists of two shops. The instructional shop is devoted to class room work for freshman and sophomore students. The class room measures 50 by 100 feet and contains thirty-two speed lathes, fully equipped; fifty work benches, each supplied with a full set of tools; one universal saw; one bench joiner and planer; one band saw; one jig saw; one motor-driven disc sander; two oil stone grinders; one shaper and carving machine; one universal trimmer;—all machines and tools being of the latest approved design for class room work in wood work and pattern making. This class room is served by a convenient stock room, and tool room.

The commercial wood shop is equipped with planing mill machinery consisting of a double-roll planer, one rip saw, one cross cut table saw, one swinging cut-off saw, one lathe with twelve-foot bed, one joiner, one molding machine, one double-headed shaper, one mortising and boring machine, one drum sand papering machine, and an assortment of benches, clamps, glue pots, etc. This shop is 40 x 100 feet and is driven by a 20 hp. electric motor. A lumber shed and steam dry kiln adjoin.

TECHNOLOGY OF FABRICS

Associate Professor Cheatham

Instructor McKenna

TECHNOLOGY OF FABRICS 1—Fabric Construction—Semester 1. (Cheatham and McKenna)

Sophomore VIII: (2 and 0)

A study of yarns used in fabrics. Yarn calculations. Classes of textile fabrics. Classes of woven fabrics. Method of representing weaves. Weaves used in standard fabrics. Diameters of yarns. Maximum ends and picks per inch. Effect of yarn twist. Shrinkage and take-up. Reed calculations. Air space and ends per dent in reeds. Cloth calculations.

Text-book: E. A. Posselt's "Technology of Textile Design."

TECHNOLOGY OF FABRICS 2—Elementary Design—Semester 2. (Cheatham and McKenna)

Sophomore VIII: (2 and 0)

Prerequisite: Technology of Fabrics 1.

Production of designs representing derivative twills and satins, honeycombs, mock leno, granites, crepe, bedford cords, double cloth, pique, corduroy, velvet, and extra warp designs. Extra selvage motions, cam designing and top riggings.

Text-book: Posselt's "Technology of Textile Design."

TECHNOLOGY OF FABRICS 3—Dobby Designing—Semester 1. (Cheatham)

Junior VIII. (0 and 2)

Prerequisite: Technology of Fabric 1, 2.

A study of pattern styles. Method of combining two or more weaves. Ratio of construction for different weaves in patterns. Laying out designs when either "ground" or "over-all" is given. Drawing in and chain drafts and reed plans. Point to start drawing warp. Reed, harness and warp calculations. Each student is required to produce ten designs from sketches and cloth specifications.

TECHNOLOGY OF FABRICS 5, 6—Fabric Analysis—Semesters 1 and 2 (McKenna)

Junior VIII: (0 and 2)

Prerequisite: Technology of Fabrics 1, 2.

Methods of distinguishing between cotton, wool, silk and linen. Finding per cent of different fibers in fabrics. Determining amount of size in fabrics. Methods of finding yards per pound from small samples. Over-all and ground constructions. Per cent of warp and filling. Warp and filling numbers. Finding weave and looming

plans. Each student is required to analyze six samples the first semester and ten the second semester.

Required equipment: No. 607 Steel Rule; 1" Pick Glass; Pick Needle.

TECHNOLOGY OF FABRICS 7—Leno Designing and Warp Preparation—Semester 1 (Cheatham)

Senior VIII: (2 and 0)

A study of warping and slashing for gray goods. Size mixtures. Humidity requirements. Color in fabric production. Methods of dressing colored warps. Loom beam dressing and warping layouts for colored warps. A study of cross weaving on cord and steel douns.

Text Book: I. C. S. on Leno Weaves & Leno Attachments.

TECHNOLOGY OF FABRICS 8—Jacquard Designing—Semester 2. (McKenna)

Senior VIII: (0 and 4)

A study of the different types of Jacquard machines. Types and methods of harness building. Laying out designs for different tie ups. Card cutting and lacing. Method of repeating and machine lacing. Each student will be required to make one design for a specified tie-up and to prepare cards therefrom.

Text-book: I. C. S. on Jacquards.

TECHNOLOGY OF FABRICS 9—Weave Room Methods—Semester 2 (Cheatham)

Senior VIII: (3 and 0)

Organization and laying out of weave room machinery. System of keeping records on typical styles of fabrics. Cost finding for different types of fabrics. General weave room management.

General Management of weaving mills, including organization and laying out of weaving room and preparatory machinery, Cost finding.

TECHNOLOGY OF FABRICS 11.—Plain Weaving—Semester 1. (McKenna)

Sophomore VIII: (0 and 2)

Instruction in the operation of automatic and non-automatic looms. Drawing in warps. Warping, winding and slashing.

TECHNOLOGY OF FABRICS 12—Loom Fixing—Semester 2. (McKenna)

Sophomore VIII: (0 and 2)

A systematic study of the motions of a loom. Setting and timing the parts with particular reference to economy in power and supplies. Multiple cam setting and production calculations.

Nelson's "Practical Loom Fixing"

TECHNOLOGY OF FABRICS 13, 14—Fancy Weaving—Semesters 1 and 2. (Cheatham)

Junior VIII: (0 and 2)

Prerequisites: Technology of Fabrics 11, 12.

This course is a combination of practical weaving and loom fixing on dobbies and box looms. A study of dobby harness setting for various types of patterns. A detailed study of dobbies and box motions, and practice in building dobby and box pattern chains.

Text Book: I. C. S. on Dobbies; Box Motions; Northrop Looms; Slashers; & Warpers.

TECHNOLOGY OF FABRICS 15 and 16—Pattern Weaving—Semesters 1 and 2 (Cheatham)

Senior VIII: (0 and 2)

Practice in putting on dobby, box, and jacquard patterns which have been worked out by the students in courses 3, 7, and 8

TECHNOLOGY OF FABRICS 18. —Knitting — Semester 2. (Cheatham.)

Senior VIII: (0 and 2)

A study of flat and circular machines. Spring and latch needles. Gauge and needles per inch. Functions of all parts of machines. Narrowing and widening. Splicing and reinforcing. Yarns for different gauges. Yarn changes, building pattern chain for hose and half hose. Transferring and looping. Rib knitting. Changing the stitch. Finishing the hosiery.

Division Rooms and Equipment

The equipment for this division occupies three rooms on the top floor of the Textile Building besides one office and two class rooms.

Knitting Room.—One "K" model Scott and Williams 220 needle hosiery machine; one Hemphill 200 needle "Banner" hosiery machine; one Brinton 176 needle ribber; one Jenckes 176 needle hosiery machine; one Wright Steady Dial looper; one 16-bobbin circular braider; one 13-bobbin flat braider; two Merrow over-seaming machines; one 220 needle Banner knitting machine; 14 Gerhardt Hand Knitters.

Warping and Winding Room.—One Davis and Furber dressing machine; one Entwistle beamer; one Draper ball warper; one Draper beam warper; one Lowell Machine Shop single cylinder slasher; one jack spooler; one Altemus quiller; one Payne skein winder; one Steele 2-drum quiller, one 4-spindle Universal "Lee-son" No. 90 quiller; 1 12-Spindle No. 90 Universal Winder, motor drive.

Weave Room.—Seventeen 14-inch hand looms with 25 harness dobbies; one 40-inch Northop loom, 16-harness dobby; one 28-inch Northop loom, steel harness; three 40-inch Mason looms; one Crompton and Knowles 30-inch loom, 20 harness dobby and leno

motion; one Crompton and Knowles 30-inch loom, 624-hook Holton Jacquard; one Crompton and Knowles 40-inch "Gem" loom, 4 by 4 box and 25 harness dobby; one Crompton and Knowles 26-inch terry towel loom, 3 by 1 box and 16-harness dobby; one Crompton and Knowles 64-inch damask loom, 4 by 1 box and 624-hook Jacquard; one Whitin 40-inch multiple cam loom; one Whitin 40-inch loom, 20 harness dobby; one 27-inch Whitin medium duck loom; two Kilburn and Lincoln 36-inch plain looms; one Crompton and Knowles 30-inch loom, 2 by 2 box and 16 harness dobby; one Crompton and Knowles 30-inch loom, 416-hook Jacquard and card multiplier; one "E" model 28-inch Draper loom, steel harness warp stop motion; one "E" model 28-inch Draper loom, two harness "string" warp stop motion; one "E" model 28-inch Draper loom, multiple cams and extra selvage motion; one "K" model 28-inch Draper loom; double filling fork, feeler and leno motion; one 40-inch "Ideal" Stafford loom, feeler and 624-hook C. & K. Jacquard; one 30-inch "Ideal" Stafford bag loom; one 40-inch "Ideal" Stafford loom, two harness; one "Ideal" Stafford 4-harness loom; one four space, four bank, Crompton and Knowles narrow fabric loom, 416-hook Jacquard; one Crompton and Knowles 40-inch loom with 624-hook Jacquard; one Crompton and Knowles 30-inch 4 by 1 box loom with 20-harness dobby and leno motion; one Crompton and Knowles 30-inch 2 by 1 automatic box loom; one "E" model 40-inch Draper loom; multiple harness; one Hopedale Mfg. Co's 40-inch "Nordray" plain loom; one Hopedale Mfg. Co. 40-inch Nordray 5-harness satin loom; 1 C. & K. automatic Dobby Dress Goods, 46½", 25 harness, 4 x 1 Box, motor drive; 1 C. & K. Dobby Silk, 60 in., 25 harness, 4 x 4 Box, motor drive; one Royle French index, piano, card cutting machine; four drawing in frames and a complementary supply of reeds, combs, harness and pick gears. One Crompton & Knowles 26" Terry Towel loom, 2x1 Box, equipped with 16 Harness double cylinder and rocking cylinder motion dobby, positive terry let-off mechanism, 2 bank warp stop motion and spring jacks for the dobby; one 424-hook Halton double cylinder jacquard.

TEXTILE CHEMISTRY AND DYEING

Professor Doggett

TEXTILE CHEMISTRY 1—Organic Chemistry—Semester 1.

Junior VIII: (2 and 2)

Prerequisite: Chemistry 1, 2.

After a general introduction a detailed study of the aliphatic series follows, including constitution and structural theory. Some attention will be given to the history of organic chemistry..

The laboratory work consists in the preparation of one or more organic compounds illustrating each group. Some time is also given to qualitative organic analysis. Special attention is given to the proper setting up and manipulation of apparatus.

Text-book: Cohen's "Theoretical Organic Chemistry." Holleman's "Laboratory Manual of Organic Chemistry for Beginners."

TEXTILE CHEMISTRY 2—Organic Chemistry—Semester 2.

Junior VIII: (2 and 2)

Prerequisite: Textile Chemistry 1.

The aromatic series of organic compounds is studied, special prominence being given to the structure and preparation of synthetic dyestuffs and of the intermediate compounds from which they are made.

In the laboratory typical aromatic compounds illustrative of each group as well as a number of intermediates and dyestuffs are prepared.

Text-book: Cohen's "Theoretical Organic Chemistry."

Reference book: Cain and Thorpe's "Synthetic Dyestuffs."

TEXTILE CHEMISTRY 3—Organic Chemistry—Semester 1.

Senior VIII: (2 and 2)

Prerequisites: Chemistry 1, 2; Textile Chemistry 1, 2.

The manufacture, uses, and technical analysis of the more important chemicals and other compounds used in the textile industry are studied.

The laboratory work in connection therewith consists in the preparation and analysis of the chemicals and other products most commonly used.

Reference Books: Knecht, Rawson and Rosenthal's "Manual of Dyeing"; Lunge's "Technical Chemists' Handbook"; Thorpe's Dictionary of Applied Chemistry."

TEXTILE CHEMISTRY 4—Dyeing—Semester 2.

Senior VIII: (0 and 4)

Prerequisite: Textile Chemistry 3.

This course includes the bleaching, dyeing, mercerizing, and printing of cotton. Some attention is also given to the dyeing of wool and of silk. The more important mordants are prepared and applied, and experiments illustrating the properties and uses of gums, starches and chemicals used in the textile industry are made. Then follows color matching and the identification of dyes on the fiber. A brief discussion of the physical and chemical principles involved precedes the laboratory work of each period.

Text-book: Fraps' "Principles of Dyeing."

Reference Books: Knecht, Rawson and Rosenthal's "Manual of Dyeing"; Knecht and Fothergill's "Principles and Practice of Textile Printing"; and C. M. Whittaker's "The Testing of Dyestuffs in the Laboratory."

Division Rooms and Equipment.

The work in textile chemistry and dyeing is carried on in an experimental laboratory and dyehouse.

The experimental laboratory has accommodation and apparatus for thirty students. The desks are supplied with gas, water, drawers, and lockers. The dyehouse equipment comprises one Schaum and Uhlinger self-balancing hydro-extractor; one model vacuum dyeing machine with steam engine attached; one Birst sample dyeing machine with electric motor attached; one calico printing machine; one Butterworth jigger; one Psarski dyeing machine; one Franklin dyeing machine; one Hussong dyeing machine; one mercerising machine for years; one steaming and ageing box; jacketed copper kettles.

VETERINARY SCIENCE

Professor Feeley.

VETERINARY SCIENCE 2—Anatomy and Physiology—Semester 2. (Feeley)

Junior 1, Elective: (2 and 2)

This course is a study of anatomy, physiology of digestion, farm sanitation, common diseases, and first aid treatment and is especially arranged for agricultural students.

The course in anatomy, which is arranged as an introduction to the study of physiology of digestion and stock judging; includes the study of skeletons and the principal articulations, muscles of locomotion and the organs of circulatory, respiratory, digestion, and urinary apparatus. Skeletons, models, and charts are used in this course. The physiology of digestion treats of the chemical and physical processes by which food is made soluble and capable of absorption. Farm sanitation deals with sanitary conditions and with the fundamentals in the control of contagious and infectious diseases. The common diseases and first aid treatment of farm animals are also studied.

Text-book: Hadley's Veterinary Science.

VETERINARY SCIENCE 3—Diseases of Animals—Semester 1. (Feeley)

Senior I, Elective : (2 and 2)

This course covers the principles of etiology, pathology, diagnosis, and treatment of the various diseases of domestic animals.

VETERINARY SCIENCE 101—Semester 1. (Feeley)

Two-year Agr. XII: (2 and 2)

A brief study of anatomy, physiology, digestion, farm sanitation, common diseases, and first aid treatment of farm animals.

Text-book: "Veterinary Studies for Agricultural Students"—Reynolds.

YARN MANUFACTURING

Professor Eaton

Assistant Professor Campbell

YARN MANUFACTURING 1—Pickers—Semester 1. (Eaton and Campbell)

Sophomore, VIII: (2 and 2)

Opening and mixing cotton. Study of bale breakers, automatic feeders, intermediate and finisher lappers. Various styles of openers, setting and adjusting same. Cleaning trunks, different kinds of beaters, screens, fans, calendar rolls, evener motion and measuring motion. Calculation for drafts, production, speeds, etc. Practice operating pickers and cleaning machinery.

Text-book: Winchester's Cotton Yarn Manufacture.

YARN MANUFACTURE 2—Cards and Drawing Frames—Semester 2 (Eaton and Campbell)

Sophomore VIII: (2 and 2)

A study of the revolving flat card, principal parts, stripping, clothing, grinding, brushing, and settings. Calculations for speeds, production, waste, draft, and constants for same. Setting of metallic and leather covered rolls on the drawing frame. Care and varnishing leather covered rolls, calculation for speeds and drafts.

Practice operating cards, drawing frames, and other machinery.

Text-book: Winchester's "Cotton Yarn Manufacture."

YARN MANUFACTURE 3—Roving Frames—Semester 1. (Eaton) Junior VIII (2 and 2)

The construction and operation of roving frames, study of the slubber, intermediate, roving frame, and jack frame. The different styles of top rolls used and the method of weighting them. Making necessary calculations for draft, twist, tension, lay, taper and constants for same. Production per spindle and sizing the roving, turns per inch for different hanks.

Practice operating roving frames.

Text-book: Winchester's "Cotton Yarn Manufacture."

YARN MANUFACTURE 4—Cotton Grading. Doubling and Drafting—Semester 2 (Campbell)

Junior VIII: (2 and 2)

Classing of cotton according to U. S. Government standards for grades, tinges, and stains. Stapling of cotton, study of Sea Island, Egyptian, and all grades of cotton raised in the United States. Methods of ginning, marketing, contracts for cotton, receiving and handling cotton at mills, and claims.

Text-book: Notes.

Calculation for draft, production, weights, and number of machines required for different counts, labor costs, and production of yarn from picker to spinning frame inclusive.

Practice operating spinning frames.

Text-book: Lectures and reference books.

YARN MANUFACTURE 5—Spinning, Spooling and Twisting—Semester 1 (Eaton)

Senior VIII (2 and 2)

Construction and principal parts of spinning and spooling machines, such as builder motions, travelers, rolls and creels. Calculations on twisting, drafting, doubling, and constants. Wet and dry twisting, amount of twist in different ply and coarse yarns, balanced twist, and thread. Size of rings, steel and brass travelers for different counts. Calculation for the same.

Practice operating spinning and spooling machines.

Text-book: Winchester's "Cotton Yarn Manufacture."

YARN MANUFACTURE 6—Combers, Sliver Lap, and Ribbon Lap—Semester 2. (Campbell)

Senior VIII: (1 and 2)

Construction, setting, and adjustment of sliver lap and ribbon lap machines. Calculations for draft and production of the same. Study of somber, timing, setting for different staples of cotton and production of waste. Operation and management of combers, and all necessary calculations.

Practice in operating the sliver lap, ribbon lap, and comber machines; also in running test lots of cotton through the different machines.

Text-book: Winchester's "Cotton Yarn Manufacture."

YARN MANUFACTURE 8—Mill Economics—Semester 2. (Eaton)

Senior VIII: (1 and 0)

The character of this course is descriptive rather than theoretical. Its aim is to explain the principles of economics as applied to general management. This includes the study of cost of production in the various departments, wages and labor conditions, care of mill and mill village. Students will report in class on articles assigned them in technical books and periodicals.

Division Rooms and Equipment.

Picker Rooms.—Pickers—One Atherton automatic feeder; one Atherton breaker lapper; one Atherton finisher lapper. Pickers are equipped with Brown-St. Onge patent adjustable grid bars.

Card Room.—Cards—One Mason 40 inch revolving top flat card 1, Woonsocket Machine Co., Revolving Top flat card.

Double Carding Process.—One Saco and Pettee 40 inch breaker card; one Saco and Pettee 20 inch improved lap winder; one Saco and Pettee 40 inch finisher card.

Combing.—One Whitin sliver lapper; one Whitin four head, ribbon lapper, one eight head,, Whitin high speed comber.

Railway Heads.—One Saco and Pettee railway head, with evener motion, stop motion and metallic rolls; one Mason railway head, with evener motion, stop motion and metallic rolls.

Drawing Frames.—Two Saco and Pettee drawing frames four deliveries, stop motions, metallic rolls; one Mason draw frame, four deliveries, stop motions and metallic rolls; one Whitin drawing frame four deliveries, leather covered rolls, one Woonsocket drawing frame, four deliveries, Metallic rolls.

Fly Frames.—One Saco and Pettee 12 x 6 inch, 40 spindle slubber, with latest differential motion; one Saco and Pettee 6 x 3 inch 80 spindle, fine roving frame, with latest differential motion, one new four roller Slubber 60 spindles Saco Lowell, one new four-roller intermediate 72 spindles Saco Lowell, one new Woonsocket fine frame 80 spindles, one Woonsocket 6 x 2½ inch, 96 spindle jack roving frame, with Daly's improved differential motion.

Ring Spinning.—One Saco and Pettee combination warp and filling ring spinning frame, 128 spindles; one Mason combination warp and filling ring spinning frame, 112 spindles; two Fales and Jenks combination warp and filling ring spinning frames, 80 spindles each designed for spinning fine counts. two Whitin combination warp and filling ring spinning frames, 80 spindles each. One new Fales and Jenks tape drive Westinghouse motor driven 80 spindle spinning frame for both warps filling. 1 H. & B 80 spindle, motor driven spinning frame with self weighting back and middle rolls traveling clearer.

Spooling.—Two Draper spoolers 40 spindles each; one Saco and Pettee spooler, 72 spindles; one Barber-Coleman automatic knitter, one Byrd automatic knitter; One motor driven Westinghouse 24 spindle Eastern and Burnham spooler; one Barber-Coleman knitter "Simplex."

Twisting.—One Draper combination wet and dry twister, 48 spindles; two Fales and Jenks wet twisters, combination filling and taper top wind; 70 spindles each.

Winding.—One universal winder and doubler; one Foster Cone and tube winder.

Reeling.—One Draper 54 inch reel, 50 spindles.

MISCELLANEOUS EQUIPMENT—One set Washburn wooden spinning rollers; one set self weighting iron rollers; Fairbanks Scales; Model of Daly's differential motion; models of Campbell ball bearing rolls; sample from all processes in making spinning rings; model of Eagle gin; Charlotte Supply Co's skein tester; Reeves variable speed transmission; Bahnson and American Moistening Co. Humidifiers.

TESTING LABORATORY—One Alfred Suter direct yarn counter; one Alfred Suter twist counter; Brown and Sharpe roving reel, yarn reel scales and weights; Henry L. Scott Yarn and Cloth tester, motor driven; Moscrop single strand tester; Emerson conditioning oven; Torsion Balance yarn calculating scales and necessary accessories.

ZOOLOGY AND ENTOMOLOGY

Professor Sherman

Associate Professor Eddy

Assistant Professor Anderson

ZOOLOGY 2—General Zoology—Semester 2 (Anderson)

Sophomore, I, IX, XIII, (2 and 4)

A study of the fundamental principles of structure and life processes of animals followed by a survey of the animal kingdom with particular reference to the economic groups. Given by text-book references, laboratory and field practice, and supplementary lectures.

This course is designed to give the necessary general knowledge of zoology and lay a foundation for the special work in agriculture that follows.

Text-book: "Outlines of General Zoology."—Newman Laboratory Manual: "Laboratory Manual of Zoology,"—Hyman.

ENTOMOLOGY 3:—General and Applied Entomology—Semester 1. (Eddy)

Junior 1, Elective: (2 and 2)

Prerequisite: Zoology 2.

A study of the fundamental structure, development, habits groups and importance of insects with special reference to the economic forms.

Text-book—"Applied Entomology"—Fernald.

**ENTOMOLOGY 4—Advanced General Entomology—Semester 2.
(Eddy)**

Senior I, Elective: (2 and 2)

Prerequisite: Entomology 3.

A fundamental and comprehensive study of the orders and families of insects. The morphology of insects will be studied from the taxonomic viewpoint. Some attention will be given life histories, adaptations, reactions and ecological problems.

Reference—"Introduction to Entomology"—Comstock.

**ENTOMOLOGY 5 and 6—Economic Entomology—Semester 1 and
2 (Eddy)**

Senior I, Elective: (2 and 2)

Prerequisite: Entomology 3.

The first semester includes a study of insect pests attacking field crops and stored products. Opportunity is offered for observations of economic pests in the field and granary, thus familiarizing the students with the work and habits of the important insect pests. Approved methods of control, including cultural practices, poison applications, and fumigation methods are thoroughly treated.

The work of the second semester is a study of orchard, greenhouse, and also truck and garden insects. The theoretical studies are supplemented by observations of insects under field conditions. Practical work is given in the making of insecticides as well as in applying control measures.

Text-book: Herrick—"Injurious Insects."

**ENTOMOLOGY 7—Insects of Forest and Shade Trees, and Orna-
mental Shrubs—Semester 1 (Anderson)**

Senior I, Elective: (2 and 2)

Prerequisite: Entomology 3.

A study of the more important insects attacking forest, shade and ornamental trees and shrubs; including habits, life-histories and means of control. The laboratory periods will be spent largely in collecting and studying living material.

Entomology 9—Insect Morphology—Semester 1 (Anderson)

Senior I, Elective: (2 and 2)

Prerequisite: Entomology 3.

A study of the internal and external anatomy of insects: the course to include a limited amount of histological technique. Laboratory Manual: "The Anatomy of Insects"—Comstock—Kellog. Reference: "Introduction to Entomology"—Comstock.

Entomology 10—Beekeeping—Semester 2 (Anderson)

Senior I. Elective: (2 and 2)

An introduction into the scientific and economic phases of beekeeping. The college apiary affords the student an opportunity to get first-hand information in the production of both comb and extracted honey.

Text-book: "A B C and X Y Z of Beekeeping"—by A. I. Root.

Entomology 11—Animal Parasitology—Semester 1 (Anderson)

Senior I. Elective: (2 and 2)

Prerequisite: Entomology 3.

A brief review of animal parasites and their relation to the health of man and animals. Lectures, laboratory and field practice in biology and practical problems in sanitation.

Text-book: "Animal Parasites and Human Diseases."—Chandler.

Entomology 12—Systematic Entomology—Semester 2 (Sherman)

Senior I. Elective: (1 and 4)

Prerequisite: Entomology 3.

Identification of insects in certain groups to genera and species: field and laboratory practice in collection and preservation of specimens: study of injurious and beneficial habits, and structural adaptations to mode of life. References: Volumes and papers from College and Division Libraries.

Entomology 13 and 14—Entomological Problems—Semesters 1 and 2. (Sherman, Eddy, Anderson)

Senior I. Elective: (1 and 0)

Prerequisite: Entomology 3.

A study of modern Entomological problems, methods and organization on the seminar or round-table basis, with all members of the staff and advance students participating in the program.

Entomology 15 and 16—Minor Investigations and Thesis—Semesters 1 and 2 (Sherman, Eddy, Anderson)

Senior I. Elective:

Prerequisite: Entomology 3.

In exceptional cases credit may be granted on work in preparing a thesis intended to meet a part of the graduation requirements and as a part of the requirements for civil service examinations when the results are findings of the student. The number of credit hours allowed will depend on the nature of the problem, the amount of work involved and the quality of the thesis.

This work should be supplemented by Entomology 13 and 14.

Zoology 22—Ornithology—Semester 2 (Sherman)

Senior I, Elective: (0 and 2)

Prerequisite: Zoology 2.

Field and laboratory study of birds, keeping lists of those identified; consideration of the species, their habits and their relations to human welfare.

References: Chapman's "Birds of Eastern North America." Wyane's "Birds of South Carolina," and other volumes

DIVISION QUARTERS AND EQUIPMENT

General Laboratory and Lecture Room. This large room is on the first floor of Agricultural Hall, and has standard laboratory tables and lockers for general course work. Desks are supplied for advanced students specializing in Entomology and Zoology. Large windows provide excellent light for laboratory work. Necessary microscopes and other equipment for study of laboratory specimens are available.

Divisional Offices. These are located on first floor of Agricultural Hall near the laboratory and lecture room. Here are kept the files, records and library of the division.

Insecticide Laboratory. A well-equipped laboratory on the first floor of Agricultural Hall: equipped for instruction and practice in preparation of standard insecticides and for research work on insecticide problems.

Research Laboratory. This is a large room on first floor Agricultural Hall. Equipment is provided for microscopic technique and general research on entomological and zoological problems. Photographic equipment is available.

Beekeeping Laboratory. This is a small frame building about one-fourth mile northeast of Agricultural Hall which is used for work in beekeeping. Equipment is available for instruction in the fundamentals of modern beekeeping and a small apiary provides opportunity for practice in apiary methods.

Aquarium and Vivarium. The Division has secured the use of a commodious brick building with two large rooms, which is being fitted for keeping live animals and for laboratory and collections. Running water, tanks, and large aquarium, provide facilities for work with aquatic animals; while a screened-off portion of the space and cages, will provide for other animals. Provision is being made for work-tables, shelves, etc. for rougher laboratory work and storage of collections.

PART VI.—HISTORY, BUILDINGS, ETC.

Historical Sketch of Clemson College

Thomas G. Clemson, after whom the College is named, was born in Philadelphia in July, 1807, and died at the Fort Hill home April 6, 1888.

In 1823, then scarcely 16 years old, he ran away from home, and, after spending some time in England, went to Paris, where he took up arms in the revolution of that time. His gallantry brought him recognition and the friendship of prominent men, resulting in his being given a course in the celebrated School of Mines in Paris. In this school he remained four years, graduating with high honors.

While he was in Europe, his father died, leaving nothing to him in his will. Soon after this he returned to America, and establishing himself in Washington, practiced his profession of Mining Engineer, and accumulated a comfortable fortune. It was here that he met Miss Anna Marie, the eldest daughter of John C. Calhoun, and married her. Two children resulted from this union—a daughter, Floride, who afterwards became Mrs. Gideon Lee, of New York, and a son, John Calhoun Clemson.

Mr. Clemson was a strong advocate of the political doctrine of Mr. Calhoun, and when the war broke out, fearing arrest, he and his son escaped by night in a boat, and walking to Richmond, offered their services to President Davis. Mr. Clemson was assigned to the Trans-Mississippi Nitre Mining Department, where he served until the end of the war. His son was appointed a Lieutenant and assigned to active duty.

At the end of the war, Mr. Clemson with his family came to Pendleton and resided with Mrs. John C. Calhoun until her death in 1866.

Mr. Clemson was interested as far back as this date in the establishment of an Agricultural and Industrial College. In November 1866, a Committee was appointed, consisting of Hon. Thomas G. Clemson, Hon. R. F. Simpson and Col. W. A. Hayne, to appeal to their fellow men for

“Aid to found an institution for educating our people in the Sciences, to the end that our Agriculture may be improved, our worn and impoverished soils be recuperated, the great natural resources of the South be developed.”

In January 1867, at a meeting of the Pendleton Farmers' Society, Mr. Clemson addressed the body in "an able and most interesting and instructional discourse," and submitted in the form of a circular the appeal above referred to. The circular was written by Mr. W. H. Trescot, and closes with the words:

"Letters and contributions to be directed to the Hon. Thos. G. Clemson, LL.D., Chairman of the Committee, Pendleton, Anderson District, South Carolina."

Again in the minutes of the same Society, of which he was elected President in 1868, under date of Oct. 14, 1869, we find the following:

"The President, (Mr. Clemson), entertained the Society for half an hour on the subject of Scientific Agriculture, and the Importance of Scientific Agricultural Education."

These citations indicate an early interest on the part of Mr. Clemson in the great cause to which he later devoted his estate.

Previous to the war Mrs. John C. Calhoun had sold the Fort Hill place and negroes to her son, Col. Andrew P. Calhoun, taking in payment his bond and mortgage for \$40,200.00. At her death, she left a will, deeding to her daughter, Mrs. Clemson, three-fourths of the value of this bond and mortgage, and to her granddaughter, who at the time of Mrs. Calhoun's death was Mrs. Gideon Lee of New York, the remaining one-fourth of the bond and mortgage.

Shortly after Mrs. Calhoun's death, Mrs. Thomas G. Clemson, after considerable costly litigation foreclosed the mortgage on the Fort Hill place, and at the sale of the property in Walhalla in January 1872, Mr. Clemson, as Trustee for his wife and daughter, bid it in for \$15,000,* and he himself paid out of his private funds about \$8,000 to cover lawyer's fees, court cost, etc.

In 1871, Mr. Clemson's daughter, then Mrs. Gideon Lee, died, and seventeen days later, his only son, John Calhoun Clemson, was killed in a railroad accident at Seneca. Left childless, Mrs. Clemson willed to her husband, Thomas G. Clemson, all of her estate, "absolutely and in fee simple."†

Mr. Clemson, in his will, left to his granddaughter, Floride Isabella Lee, \$15,000 to free the property, which by the same will was donated to the State, from any claim in equity that the granddaughter might have. This was, of course, in addition to one-fourth of the estate which descended to Miss Lee from her mother.

Neither by intention, nor by donation, nor by any form of hereditary transmission does it anywhere appear that John C.

* See Title Book, Oconee County, P. 177-f.

† See Judge of Probate's Office, Oconee County, Apartment 26, Package 287.

Calhoun had anything to do with the founding of the College which bears Clemson's name.

In 1875 Mrs. Clemson died, and on April 6, 1888, Mr. Clemson followed her to the grave, and was buried in the Episcopal church yard at Pendleton.

Mr. Clemson's will was bitterly contested by the Lee family, but was finally fully sustained by the U. S. Supreme Court. After the settlement of the will, the Trustees of the College bought from Miss Floride Isabella Lee her one-fourth of the estate which adjoined the tract given to the State by Mr. Clemson.

The following extracts are made from Mr. Clemson's will ‡ in order to show clearly his purpose in offering his property to the State for the founding of the Clemson Agricultural College.

* * * * "Feeling a great sympathy for the farmers of this State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an Agricultural College upon the Fort Hill Place. My purpose is to establish an Agricultural College which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical with intellectual education, and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish a course of studies terminating in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture. But I desire to state plainly, that I wish the Trustees of said institution to have full authority and power to regulate all matters pertaining to said institution, * * * * but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries. * * * * I trust I do not exaggerate the importance of such an institution for developing the material resources of the State, by affording its youth the advantages of scientific culture, and that I do not over-rate the intelligence of the Legislature of South Carolina, ever distinguished for liberality, in assuming that such appropriations will be made as will be necessary to supplement the fund resulting from the bequest herein made."

"I therefore give * * * * the aforesaid Fort Hill place where I now reside, formerly the house of my father-in-law, John C. Calhoun, consisting of eight hundred and fourteen acres, more or less, in trust that whenever the State of South Carolina may accept said property as a donation from me, for the purpose of thereupon founding an Agricultural College, in accordance with the views I have hereinbefore expressed, (of which the chief justice of South Carolina shall be the Judge,) then my executor shall execute a deed of the said property to said State and turn over the same all property hereinafter given as an endowment of said institution,

‡ See Judge of Probate's Office, Oconee County, Apartment 64. Package 671.

to be held as such by the said State so long as it in good faith devotes said property to the purpose of the donation." * * * *

"The following named gentlemen, seven in number, shall be seven of the Board of Trustees, to-wit: R. W. Simpson, D. K. Norris, M. L. Donaldson, R. E. Bowen, B. R. Tillman, J. E. Wannamaker, and J. E. Bradley; and the State, if it accepts the donation, shall never increase the Board of Trustees to a number greater than thirteen in all, nor shall the duties of the said Board be taken away or conferred upon any other men or body of men. The seven Trustees appointed by me, shall always have the right, and the power is hereby given them and their successors, which right the Legislature shall never take away or abridge, to fill all vacancies which may occur in their number by death, resignation, refusal to act, or otherwise. But the Legislature may provide as it sees proper for the appointment or election of the other six Trustees, if it accepts the donation. * * * The name of this Institution is to be "The Clemson Agricultural College of South Carolina."

In the codicil to his will, Item 12, occurs the following significant statement:

"The desire to establish such a school or college as I have provided for in my said last will and testament, has existed with me for many years past, and many years ago I determined to devote the bulk of my property to the establishment of an Agricultural School or College. To accomplish this purpose is now the one great desire of my life."

In November 1889, the General Assembly of South Carolina passed the necessary acts authorizing the acceptance of the terms of Mr. Clemson's will, and the establishment of the College. The following extracts are taken from the State laws relating to the College:

Section 1300: "The Honorable Thomas G. Clemson having departed this life on the sixth day of April, A. D. 1888, leaving of force his last will and testament * * * wherein he devised and bequeathed the Fort Hill plantation, as well as all his other property, both real and personal, except certain legacies in the said will mentioned and provided for, all in trust to convey to the State of South Carolina when the said State shall accept the same for the purpose of establishing and maintaining an Agricultural and Mechanical College upon the aforesaid Fort Hill plantation upon the terms and conditions of said will, the State of South Carolina hereby expressly declares that it accepts the devise and bequest of Thomas G. Clemson, subject to the terms and conditions set forth in his last will and testament."... * * * *

Section 1302: "The said College shall be under the management and control of a Board of Thirteen Trustees composed of the seven members nominated by said will and their successors and six members to be elected by the Legislature in Joint Assembly."

Section 1304: "That it shall require a two-thirds vote of said Board of Trustees to authorize the expenditure of any moneys appropriated to said College by the State, or to authorize the sale or transfer or re-investment of any property or moneys arising from the sale of any property under the provisions of this Act."

"Section 1319: All the privilege tax on fertilizers heretofore required to be paid to the Commissioner of Agriculture shall in the future be paid to the Treasurer of the State, subject to the order of the Board of Trustees of the Clemson Agricultural College of South Carolina; and so much of the money so received as shall be necessary to defray the expenses of the Board in performing the duties now by this Act devolved upon them shall be thus used, and the balance shall go to the said College, for its erection and maintenance."

It will be seen from the above extracts that the State accepted in good faith the terms of Mr. Clemson's will, features of which were the maintenance of the College, the recognition of the self-perpetuating life membership appointed by Mr. Clemson, and the naming of the College after Mr. Clemson.

In his will Mr. Clemson provides that there should be seven life trustees and that six might be selected by the State. It would seem appropriate to mention that in the appointment of the seven life trustees, Mr. Clemson had two purposes in mind. The State had only recently emerged from negro domination and during a part of that time the doors of the University and of the Citadel had been closed because of the action of a radical legislature admitting negroes as well as whites. Mr. Clemson wished to insure white supremacy in the government of Clemson. Also, at the time he wrote his will, industrial education had no standing with southern educators and the danger of having the college diverted from its purpose into a classical institution loomed large in Mr. Clemson's mind.

At the time of the Act of Acceptance, however, these dangers were overpassed and the Legislature passed the rule that a two-thirds vote of the entire Board of Trustees would be necessary to expend any moneys appropriated to the said college by the State.

This is a historical sketch, not an argument. Whether it were wise to create a separate agricultural and mechanical college located in one corner of the state is now very largely an academic question—likewise it may be a question with some whether the State should have accepted the bequest under the terms of Mr. Clemson's will. In the face of an accomplished fact, logic and lamentation are alike impotent. South Carolinians are more interested in knowing not what might have been done, but what has actually been accomplished. Clemson College itself is the answer to that question.

HISTORY OF THE COLLEGE

The College was opened in July 1893, with an enrollment of 446 students. The session extended from the third Thursday in February to the third Thursday in December, with the idea of giving all students in Agriculture an opportunity to be instructed in the practical phases of that subject during the crop-growing season.

On the night of May 22, 1894, the main College building was burned, but the regular work continued, and the building was promptly re-built.

The first graduating exercises were held in December 1896, the graduating class numbering thirty-seven,—fifteen in the Agricultural Courses, and twenty-one in the Engineering Courses. In the fall of 1897, the session was changed to begin in September and close in June, as it had been found inadvisable to operate the College through the hot summer months. The exercises of the second commencement which would normally have occurred in December 1897, were held February 6 to 9, 1898. The undergraduate classes were continued until June. Owing to the change from winter to summer vacation, there was no class graduated in 1897.

By an act of the State Legislature in the session of 1904, and amended in the session of 1907, 165 beneficiary scholarships were established, of the value of \$100 per annum each, and free tuition apportioned among the counties as are the members of the Senate and House of Representatives. The number has since been increased to 170, by the creation of five new counties.

ENROLLMENT				GRADUATES BY COURSES.										
Years	Regular Sessions	Summer School	Total Enrollment	Agriculture	Mech. Elec. Engr., **	Electrical Engr.	Mechanical Engr.	Civil Engr.	Architecture	General Science	Chemistry *	Textile Engr.	Textile Industrial Ed'n	Total Graduates
1924-1925	1155	484	1639	50		29	10	17	6	1	1	10	22	146
1925-1926	1032	55	1071	45		29	15	8	4	1	6	8	15	131
Totals	23415	539	26142	1104	514	146	92	259	42	4	66	229	37	2498

(*) Includes Chemical Engineering.

(*) Includes 13 graduates in Chemistry and Geology.

(**) Courses separated after 1920.

COLLEGE BUILDINGS AND GROUNDS

Location.—The College is located on the Fort Hill homestead of John C. Calhoun, on the dividing line between Oconee and Pickens counties, in the picturesque foothills of the Blue Ridge. It has an elevation of 800 feet above sea level, and commands an ex-

cellent view of the mountains to the north and west, some of which attain an altitude of nearly five thousand feet. The climate is invigorating and healthful, and the surroundings are in every way favorable to the highest physical and mental development.

The College is one mile from Calhoun, a station on the main line of the Southern Railway, and two miles from Cherrys, on the Blue Ridge Railroad. By means of these roads and their connections, the College is easily accessible from all parts of the State. It is connected by telegraph and long-distance telephone with all parts of the country. The post office is conveniently situated on the campus, and receives eight daily mails.

Grounds.—The College grounds comprise about 1544 acres, including the campus, the farm, and the Experiment Station grounds. The campus, including about 200 acres, is laid out in walks, drives, and lawns, and is shaded by a beautiful grove of native forest trees.

“Bowman Field,” lying just in front of the Academic, Textile, and Y. M. C. A. Buildings, provides for part of the military drill.

“Riggs Field,” a ten-acre athletic field, the largest and best arranged of its kind in the South, is located to the west of the Y. M. C. A. Building, and provides for baseball, football, track, tennis and military drill.

ACADEMIC BUILDING

The Academic Building is a three-story brick structure, 100 by 132 feet, trimmed with gray sandstone. It contains 36 rooms, including recitation rooms, library and reading rooms, literary society halls, and the offices of the President, the Registrar, the Commandant, the Treasurer, the Director of Student Affairs, the Alumni Secretary, and the Director of Athletics. The public **Telegraph Office** is on the ground floor of this building. Adjoining this building is Memorial Hall, the College Chapel, which has a seating capacity of about eighteen hundred. It is used for religious service and as an assembly room. In the basement are the class rooms and laboratories of the physics division. The entire building is provided with steam heat and electric lights.

AGRICULTURAL HALL *

The Agricultural Hall is a building 146 by 94 feet, in colonial style, and constructed of red side-cut brick, with columns and trimmings in oolitic limestone. It is furnished with a complete system of electric lights, water and sewer connection, and steam heat; provides class rooms and laboratories for instruction in agriculture, soil physics, botany and bacteriology, zoology and entomo-

*Burned April 2, 1925. To be rebuilt 1925-1926.

logy, geology and mineralogy, and offices and laboratories for the Experiment Station. It also contains the Experiment Station library, the museum and gymnasium hall.

ENGINEERING BUILDING

The engineering building is a substantial brick structure containing about 38,000 square feet of floor space. On the first floor are the civil engineering division, testing laboratories, machine shop, wood shop, forge shop, and foundry. On the second floor are the offices, classrooms and the engineering drafting and designing rooms. The third floor is devoted to architecture.

ELECTRICAL ENGINEERING LABORATORIES

A one-story brick building designed for delicate instrument work, contains the instrument laboratory, the standardizing laboratory, room for storing instruments, supply room, and the division office.

Adjoining the above is another single story brick building which contains the lecture room 25 by 35 feet (equipped with raised seats); the dynamo laboratory 35 by 53 feet; and large dark room and supply room.

TEXTILE BUILDING

This building is a brick structure of modern cotton mill design, 168 by 75 feet. It is of the slow-burning type, built according to fire insurance regulations, after plans of an experienced mill engineer. The building, although designed for educational and experimental purposes, containing office, lecture rooms and laboratories, retains the more prominent features of a typical Southern cotton mill. This affords the student an opportunity of gaining many points of valuable information in connection with mill construction, along with the manipulation of cotton fibres and the study of cotton mill processes and operations.

The Printery, which is located in the south basement of the Textile building, is equipped as follows: One Miehle two-revolution printing press, 30 by 42-inch bed; three Chandler & Price job presses; one Chandler & Price cutter; one Morrison stitcher; two perforators; one letter folder; two Hammond cabinets; two imposing stones; one No. 5 model linotype machine and one No. 14, Single key-board, linotype machine with supply of matrices for same; and one Automatic Miller Feeder and a supply of type, furniture, etc. All the machines are driven by individual motors. The College reports, bulletins and miscellaneous stationery are printed here.

CHEMISTRY BUILDINGS

Two substantial brick buildings of about the same dimensions, each consisting of two stories and a basement, and connected on the first and second floors by glass-covered passageways, are devoted to chemical work. The north building serves partly for academic work and partly for the analytical work of the Fertilizer Analysis Division of the Public State Work of the college. The entire south building is devoted to academic work. Both buildings are well ventilated, heated by steam, and lighted by electricity.

FERTILIZER BUILDING

This is a three-story brick building, situated near the south chemistry building, and containing the offices of the Secretary of the Board of Fertilizer Control, fertilizer tag rooms, etc.

The **Clemson College Post Office** occupies the ground floor of this building.

VETERINARY HOSPITAL

The Veterinary Hospital is a two-story frame building 48 by 65 feet, with basement 18 by 30 feet. It is furnished with electric lights, hot and cold water, and is heated by means of stoves. The basement contains a store room. The class room, office, pharmacy, and a well-equipped clinic and operating room are on the first floor. A laboratory for class work, a private laboratory and a store room for supplies are on the second floor.

DAIRY BUILDING

The Dairy Building is constructed of red brick trimmed with lime-stone. In addition to class rooms and laboratories it contains the offices of the following divisions: Animal Husbandry, Dairy, Horticulture, and Education. It is equipped with modern machinery for the manufacture of butter, ice cream and other dairy products, and for teaching modern methods of dairying.

DAIRY BARN

The Dairy Barn will accommodate both the Experiment Station and College herds. It is large enough to house 120 cows and all the feed required for these animals. It has separate box stalls for bulls and young stock. The floors are of cement, and **cork brick is used on the floors where the cattle lie.** The lighting, ventilation, sanitation, stanchions, stalls, and the equipment for cleaning and feeding are of the most modern type to be found in the country. **The milk is handled carefully in accordance with the best practice and experience of modern dairy methods.** Nearby is a calf barn and a hog barn embodying the most recent improvements in such build-

ings. There are also four large cement silos conveniently located, where the stock feed is kept to supply these barns.

Y. M. C. A. BUILDING

This building is in the Italian Renaissance style of architecture, of texture brick with colored tile inserts, terra cotta trimmings, and red tile roof. The interior finish is of stained yellow pine. It contains four floors—basement, mezzanine, first floor, and dormitory floor, giving a total of thirty-six thousand square feet of floor space. It is lighted by the indirect system, and has steam heat and modern water facilities.

The basement contains a basket-ball room, kitchen, quick lunch room, private dining room general confectionery store and soda fountain, two bowling alleys, swimming-pool, shower and locker rooms, and general toilet.

The mezzanine floor is given over principally to committee rooms, retiring rooms, and balconies.

On the first floor are the general offices, reading, games, and lounging rooms, a ladies' club room and an auditorium. The dormitory floor has thirteen living rooms, a literary society hall, a masonic lodge room, and motion picture machine facilities.

The building is handsomely furnished and equipped to make a large contribution to the religious, social, and physical life of the student body and the community.

RESIDENCES

Nine brick and fifty-nine frame residences, situated on the campus, furnish homes for most of the college teachers and officers.

BARRACKS

The cadet barracks comprise three large brick buildings. One is four stories high and contains 247 rooms for students. In the basement of this building is the dining hall 170 by 44 feet and the kitchen 50 by 37 feet. The second building is 199 by 42 feet, and contains 104 rooms. The third building is 45 by 190 feet and contains 111 rooms.

These buildings are heated by steam and lighted by electricity, and have an abundant supply of pure water. The rooms in the barracks are furnished with single-width iron cots and other necessary appointments. The dining hall is well supplied with table linen, silverware, and china, and the kitchen is furnished with modern culinary appliances.

The bathrooms and toilets are in general, located in brick buildings apart from the barracks and connected with them by covered gangways.

CALHOUN MANSION

The former residence of John C. Calhoun, is kept in honor of his memory, in accordance with the provisions of Mr. Clemson's will.

The Calhoun Relics.—Several pieces of furniture and other interesting relics, formerly the property of Mr. Calhoun, are carefully preserved in the Calhoun Mansion, where they may be seen by visitors to the College.

CLEMSON COLLEGE HOTEL

The Hotel, a frame building with one eight-room annex, situated on a hill overlooking the campus, is operated by the College. In addition to furnishing a home for many officers and teachers, it is open the entire year to a limited number of transients.

HOSPITAL

The Hospital, located about a quarter of a mile from the barracks, is a wooden building, especially designed for the purpose. It is lighted by electricity, and has a thorough sewerage system. It is in the immediate charge of the Surgeon, who is assisted by an experienced matron and nurse, thus insuring the best personal attention to each patient.

LAUNDRY

This is a brick-building especially constructed and fitted with the improved machinery of a modern steam laundry, and is operated exclusively for the students.

FARM BUILDINGS

The College farm is provided with commodious barns and other farm buildings of modern design, which are described more fully in connection with the equipment for instruction in agronomy.

HORTICULTURAL GROUNDS

The Ornamental Horticultural Grounds are situated south east of the campus. Their acreage is devoted to the growing of various trees, shrubs, and flowers, and affords a beautiful park area as well as a small ornamental nursery. The Experimental Horticultural Grounds are located east of the campus and comprise about twenty acres. This area is devoted to experiments with apples, peaches, grapes, pecans, and small fruits. Vegetable and truck crop experiments are conducted in a fertile bottom along the banks of the Seneca River, about one mile south west of the campus.

The Cannery, a building 25 by 35 feet, is situated in the Horticultural Grounds. It is equipped for canning fruits and vegetables of all kinds.

Greenhouses.—The old greenhouse, 21 by 140 feet, and containing one thousand large pot-plants of various kinds and six thousand small pot-plants, is situated in the Horticultural Grounds.

The new greenhouse, containing a central room 30 by 30 feet, and two wings, each 20 by 30 feet, occupies a prominent place in the center of the campus.

Both are used for experiment work and class instruction in horticulture, botany, etc.

PUBLIC UTILITIES

The General Water Supply is taken from Hunnicutt Creek about three-quarters of a mile above the pump station. The water flows by gravity to a settling basin 36 feet by 36 feet, from there through two gravity filters having a capacity of three hundred and fifty gallons per minute. The filtered water passes to a storage reservoir from which it is pumped into a stand pipe one hundred feet high having a capacity of 130,000 gallons. From this it is distributed from the main to the various college buildings and to all parts of the campus. This water is tested regularly to see that it is kept free from all contaminations.

The Drinking Water Supply is pumped from a bold spring in a continuous stream through the barracks. It is thus furnished fresh-pure and cold. This and all sources of water supply are kept under constant and strict surveillance and the waters are frequently analyzed as a precaution against contamination.

The Sewer System.—All of the larger buildings and most of the residences are connected with an adequate sewer system, which empties into the Seneca River more than half a mile from the campus.

LIGHT AND HEAT

All of the college buildings and residences on the campus are lighted by electricity furnished from the central power station. The principal college buildings are heated by steam.

Refrigerating Plant.—In connection with the commissary there is a refrigerating plant consisting of the following: One 6-ton Frick double-cylinder compressor supplied with gauges, etc.; one double-pipe condenser; one triple-pipe brine cooler; 25 cans of 50 pounds capacity each, and a brine reservoir for use in ice-making or refrigeration. The following rooms are cooled by the plant; One room 12 by 13 feet for general storage, one 6 by 8 feet for milk and butter, one 6 by 8 feet for fruit and vegetables, one 6 by 12 feet for meat, and two rooms 6 by 6 feet each, in charge of the Chef, and used for storage of supplies in transit to dining hall.

POWER STATION

The central power and heating plant contains two 150-hp. Stirling water-tube boilers, and two 100-hp. Lombard return tubular boilers, two Babcock and Wilcox 150-hp. water-tube boilers with the necessary pumps, feed water heaters, and other auxiliary apparatus.

The power equipment consists of one 114-kw. Fleming sidecrank engine with unafrow cylinder direct connected to a 70 kw, 2,300-volt, three phase alternator, with direct connected exciter, and one 122-hp. Fleming four-valve engine, direct connected to a three-wire 75-kw., direct-current generator, one 200 kw. turbo-generator two stage, 2,300 volt, 3-phase alternating current with direct connected exciter.

A 75-kw. rotary converter is used to convert from one kind of service to another.

The switchboard equipment consists of three standard blue Vermont marble panels, and five black enameled slate panels, all equipped with the latest and best electrical instruments and appliances. The alternators are connected to the rotary converter through three 25-kw. transformers. All the machinery is of the General Electric Company make.

The building is 40 by 108 feet, is a single story of brick and cement blocks, with metal roof.

The plant complete cost about \$53,000.00, and is in every way modern and up-to-date. It furnishes steam heat for the barracks and other college buildings, and electric lights and power to every department of the college and residences of the community. The pumping station, situated about one-half mile distant, is electrically operated from this plant. This pumping plant has both steam and electric pumps and an aggregate capacity of 1,100 gallons per minute.

Library—The general library and reference library are located on the second floor of the Academic Building. The Experiment Station Library is located in the Agricultural Building. A reference library is also maintained by the Chemical Department.

There are now approximately 30,400 volumes and approximately 10,000 public documents and government publications. About 25,000 pamphlets are available for reference. In connection with the libraries are suitable reading rooms. There are approximately 300 periodicals accessible to the students.

In the general library are thirty-seven oil paintings collected by Mr. Clemson chiefly in Holland, together with a number of portraits.

CLEMSON COLLEGE ALUMNI ASSOCIATION

The Alumni Association has established a permanent office on the main building on the campus. This office is in charge a full-time secretary, who is employed by the Governing Board of the Association. The Clemson office is a clearing house for all matters concerning the alumni. In addition to keeping accurate records of addresses and information concerning alumni, the Association has established at the Clemson headquarters a bureau for repairing Clemson Class rings, and for securing duplicates of these rings.

The Association holds its regular annual meetings at the college on Monday of commencement week. At this meeting all officers, with the exception of the secretary, are elected. The secretary, is elected by the Governing Board which is in turn responsible to the general Association for the conduct of its business. The purpose of the Alumni Association is to serve the college and the alumni in every possible way. All correspondence regarding its affairs is conducted through the Clemson office.

The Clemson Alumnus, a monthly publication, is the official organ of the Association and is mailed to graduates whose addresses are on file with the Association.

Officers of the Association

- E. R. McIVER, '05, President.
- S. R. PERRIN, '07, First Vice-President.
- G. M. ARMSTRONG, '14, Second Vice-President.
- S. M. WARD, JR., '02, Third Vice-President.
- E. G. PARKER, '24, Secretary-Treasurer.

Governing Board

- A. H. WARD, '14, Term Expires 1930.
- E. N. SITTON, '11, Term expires 1929.
- R. B. WATERS, '16, Term expires 1928.
- H. C. WANNAMAKER, '16, Term expires 1927.
- H. S. JOHNSON, '10, Term expires 1926.
- E. R. McIVER, '05, Ex-officio.
- E. G. PARKER, '24, Ex-officio.

THE SUMMER SCHOOL

In the future the Clemson College Summer School will emphasize only such courses as relate directly to agriculture and to agricultural and industrial education. These courses will include both graduate and under-graduate work in education and are designed

especially for teachers of agriculture, science and industrial arts, and heads of schools. College credit will be given for work successfully completed in the regular six weeks summer school. A few under-graduate courses in agronomy and horticulture will be offered in 1926.

EDUCATION

Profs. Crandall, Washington Ayers, Jones, and Tate

Special Methods in Teaching Agriculture.

Educational Psychology.

Principles of Teaching.

Vocational Guidance.

Industrial Arts.

Problems of Rural School Principles.

Program of Work for Part-Time Continuation Teaching.

Program of Work for Teachers of Textiles in Evening Classes.

Program of Work for Industrial Teachers of Part-time Classes.

Program of Work for Shop Teachers.

Program of Work for Teachers in Vocational Schools.

General Agriculture.

HORTICULTURE AND AGRONOMY.

Profs. Newman and Collings

Field Crops.

Fertilizers.

Elementary Horticulture.

Gardening.

Landscape Gardening.

ANIMAL HUSBANDRY.

Prof. Morgan

Poultry Husbandry.

PART VIII.—PUBLIC SERVICE

THE AGRICULTURAL EXTENSION SERVICE

The agricultural extension work of the college is carried on by the Extension Service in co-operation with the United States Department of Agriculture. The work is supported by Federal appropriations and in part by State and County appropriations. The main development of extension work has come since the enactment of the Smith-Lever Act in 1914. The purpose of Extension work is to

instruct farmers of the state in the practical application of the principles of improved agriculture in both production and marketing. A staff of specialists, some of whom are also members of the Agricultural Faculty, assist the county agents in planning and carrying out demonstrations with farmers over the state.

Publications.—A large number of publications, including bulletins, circulars, posters, and information cards, are distributed annually. The Weekly News Notes is published to carry matters of timely and practical interest to the editors and a few farmers of the state. A free press plate service is also furnished to those papers requesting it. In addition to this, news letters are issued on an average of three times per week and these are sent only to the newspapers. Monthly letters or printed circulars on poultry, orchards, gardening, dairying and boys club work are mailed free to those persons especially interested in these subjects.

County Agents.—Every county in the state, by co-operation in providing the finances, may have a county agent. These agents are agricultural college graduates who have had practical farm experience. They devote their time to instructing farmers through demonstrations, personal conferences meetings, community organizations, publications and letters.

Home Economics Work.—This work is carried on under the immediate supervision of Winthrop College. It is, however, a part of the Extension work under the Smith-Lever Act, and as such is under the general direction of the Extension Service. Nearly every county is provided with one home demonstration agent in the same way that they are provided with county agents.

Negro Demonstration.—A few negro local agents are employed to work with the negro farmers of the state in sections where the negro population is great. These agents are employed in co-operation with the State College at Orangeburg, and the President of the State College acts as District Supervising Agent.

Live Stock.—Work in this project is carried on with the idea of promoting the live stock interest of the state along sound permanent lines, and much progress has been made during recent years especially with hogs. The remarkable increase in the number of hogs is no greater than the increase in quality. Those desiring to purchase pure breeds can now, in most cases secure them within the state from breeders who have been assisted by the Extension Service. Live stock agents have also stimulated the growing of pastures and forage crops and have assisted in the feeding and marketing of cattle and the co operative purchase of fencing materials.

Dairying.—The Extension dairymen devote their time chiefly to development work such as bull associations, feed campaigns, dairy

schools, construction of silos, barns, purchase of dairy cattle and the testing and improvement of herds. This state now ranks second in the United States in number of co-operative bull associations. The time has come when farmers wishing to purchase purebred dairy cattle can obtain first class animals within the state and very few importations are necessary.

Corn and Cotton Breeding.—Variety tests of corn and cotton are conducted in a dozen localities in the state along with demonstrations in the field selection of corn and cotton. Up to date this work has resulted in showing what varieties of corn and cotton are best adapted to different sections of the state, and farmers are generally planting those varieties. A number of communities are being given assistance in organizing for growing only one variety of cotton and one of corn.

Orchards, Gardens and Potato Storage Houses.—Orchard demonstrations, potato storage houses, home gardens and co-operative canneries are the principal lines of work developed by the Extension horticulturists. The results obtained in the last few years along these lines are far reaching, and point the way for the proper utilization of some of our acres under boll weevil conditions.

Poultry Work.—The plan is to establish and develop representative poultry plants in a number of counties in the state. These furnish reliable breeding centers from which pure bred poultry of popular breeds can be secured at reasonable prices by farmers and others. The wisdom of increasing the size and quality of farm flock is now being emphasized, together with efficiency in marketing poultry products.

Marketing.—Efforts are made to secure convenient and profitable marketing arrangements for the various crops of the state. The organization of co-operative marketing associations is being encouraged. Proper grading and loading for shipment are stressed, particularly where farmers are just beginning to produce a new crop. Shipping point inspection has been provided in cooperation with the Federal Bureau of Agriculture Economics for the protection of shippers of certain perishable crops.

Entomology.—There are two principal lines of this work; first boll weevil work, and second, bee keeping work. One specialist is employed who gives a part of his time to the boll weevil work, instructing farmers as to the life history, habits, etc., of the weevil and control measures.

A specialist in bee keeping is employed to develop this industry and it has been found that this state has great possibilities along this line.

Boys' Club Work and Short Course.—Boys agricultural clubs are organized with the idea of enlisting the intelligent interest of

the boys, and through them their parents, in improved methods of agriculture. To the winners of certain contests short courses are provided at the College during the summer months.

Organizations.—Whenever conditions are suitable for community organizations, these are encouraged and the full support of the Extension Service is lent towards making them successful.

Extension Service Staff

W. W. LONG	Director
D. W. WATKINS	Assistant Director
L. V. STARKEY	Chief, Animal Husbandry Division
E. G. GODBEY.....	Extension Livestock Specialist, Spartanburg, S. C.
L. R. HAWKINS,	Livestock Agent, Florence, S. C.
J. P. LaMASTER,	Chief, Dairy Division
R. E. WATERS	Extension Agent in Dairying, Spartanburg S. C.
W. J. KEEGAN,	Extension Agent in Dairying, Florence, S. C.
T. S. BUIE,	Acting Chief, Agronomy Division
J. L. CARBERY,	Extension Agronomist (plant breeding) Spartanburg, S. C.
H. H. TRYON	Forestry Engineer, Aiken, S. C.
S. L. JEFFORDS,	Extension Agronomist (forage crops) Spartanburg, S. C.
C. C. NEWMAN,	Chief, Horticultural Division
A. E. SCHILLETTER	Extension Horticulturist
E. H. RAWL,	Extension Horticulturist
D. H. HALL,	Extension Poultry Specialist
L. H. LEWIS,	Extension Agent in Marketing, Florence, S. C.
R. W. HAMILTON	Extension Agronomist, Aiken, S. C.
J. O. PEPPER	Extension Entomologist, Clemson
C. A. OWENS	Specialist in Packing and Grading, Spartanburg
FRANKLIN SHERMAN	Chief, Division of Entomology
E. S. PREVOST,	Bee Keeping Specialist
*W. D. MOORE,	Extension Plant Pathologist
B. O. WILLIAMS	Agent Boys' Club Work
I. D. LEWIS,	Agent Boys' Club Work
A. B. BRYAN,	Agricultural Editor
HAZEL COVER COLLINGS	Acting Assistant Agricultural Editor

*On leave

District Agents

A. A. McKeown	First District	Spartanburg, S. C.
	Second District	Florence, S. C.
A. H. Ward	Third District	Aiken, S. C.

County Agents.

Name	County	Post Office
Z. D. Robertson	Allendale	Allendale
	Abbeville	Abbeville
C. Lee Gowan	Aiken	Aiken
S. M. Byars	Anderson	Anderson
	Bamberg	Bamberg
H. G. Boylston	Barnwell	Blackville
	Beaufort	Beaufort
C. L. McCaslan	Calhoun	St. Matthews
J. H. Harvey	Berkeley	Pineopolis
G. C. McDermid	Charleston	Charleston
H. K. Sanders	Chester	Chester
W. J. Tiller	Chesterfield	Chesterfield
S. C. Stribling	Cherokee	Gaffney
F. M. Rast	Clarendon	Manning
	Colleton	Walterboro
J. M. Napier	Darlington	Darlington
S. W. Epps	Dillon	Latta
T. M. Cathcart	Dorchester	St. George
W. H. Barton	Edgefield	Edgefield
R. H. Lemmon	Fairfield	Winnsboro
J. W. McLendon	Florence	Florence
M. M. McCord	Georgetown	Georgetown
W. R. Gray	Greenville	Greenville
E. L. Rogers	Greenwood	Greenwood
T. M. Evans	Horry	Conway
Gus York	Hampton	Hampton
	Jasper	Ridgeland
J. W. Sanders	Kershaw	Camden
W. F. Howell	Lancaster	Lancaster
C. B. Cannon	Laurens	Laurens
	Lee	Bishopville
C. S. Addy	Lexington	Ballentine
	Marion	Mullins
G. H. Stewart, Jr.	Marlboro	Bennettsville
T. M. Morgan	McCormick	McCormick
T. M. Mills	Newberry	Prosperity
G. H. Griffin	Oconee	Walhalla
R. F. Kolb	Orangeburg	Orangeburg
T. A. Bowen	Pickens	Pickens
J. R. Clark	Richland	Columbia
J. M. Eleazer	Sumter	Sumter
Claude Rothell	Saluda	Saluda
Earnest Carnes	Spartanburg	Spartanburg
W. D. Wood	Union	Union
C. 'L. Baxter	Williamsburg	Kingstree
L. W. Johnson	York	Sharon

THE SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION

The Agricultural Experiment Station of South Carolina is a department of Clemson College. The experiment station at present consists of the main station, which is located at Clemson, and two sub-stations, one in the coast region, located at Summerville, and one in the Pee Dee section, located at Florence. The main offices and laboratories of the station are located on the Clemson College Campus, while the station experiment farm, consisting of about 200 acres, is east of and adjoining the college campus. The investigations dealing with the fundamental principles of agricultural sciences and with the application of such principles to practical agricultural operations are carried on in the laboratories and on the experiment station farm at Clemson. The experiments looking to the adaptation of such scientific data accumulated here and elsewhere to the conditions peculiar to certain sections of the State are carried on at the sub-stations and at branch laboratories established in certain sections of the State for this purpose.

It is the aim of the experiment station to carry on research work on problems which have a direct practical bearing on the agriculture of the State. With this end in view elaborate experiments relative to the best methods of procedure under various conditions with the principal plants and animals have been undertaken. As progress is made with such experiments the results obtained are given out to farmers in the form of bulletins, circulars and personal letters. Since the establishment of the station 225 such bulletins and 33 circulars have been published, covering practically all phases of agriculture.

Aside from the research work and the publication of results obtained from such research the experiment station performs various other duties. Among these might be mentioned the entomological and pathological inspection work which aims to protect the farms, orchards and gardens of the State against the introduction of injurious insects and diseases; the biological and soil survey of the State; and the cooperative experimental work carried on with hundreds of farmers in the State. The technically trained experts of the station staff are regarded as authorities in their several specialties and they are constantly giving out information relating to the various lines of agricultural endeavor. More than fourteen thousand personal and circular letters are written annually to residents of the State giving technical information to individuals on special subjects. The station staff also aids in disseminating agricultural knowledge by co-operating with the Extension Service of the college in holding agricultural meetings and conferences and by meet-

ing with the farm demonstration agents and giving to them technical information which they in turn carry through the demonstration work direct to the farmers.

Close cooperation is maintained with the various research bureaus of the National Department of Agriculture and with the departments of the college. The laboratories are always open to the inspection of the students and other people of the State. The same is true of the experiment station farm. There is always opportunity for a limited number of students to secure work in the various divisions of the station and to assist in the research work carried on by the members of the station staff.

A full report of the work and expenditures of the Experiment Station is published annually and this report and all other publications of the station are free and will be sent on request. Requests for these should be addressed to H. W. Barre, Director, Clemson College, S. C.

Cooperative Experimental Work.—This work is carried on under the supervision of the Director of the Experiment Station. Many farmers are enrolled in this important line, which includes a repetition of many of the experiments conducted at the parent experiment station located at the college. Co-operative experimental work is intended to verify new facts and laws under the various soil and climatic conditions in South Carolina.

Branch Experiment Stations.—In order to reinforce the main experiment station located at the college, two additional branch stations have already been established, one at Drainland in the coastal plain, and another near Florence, in the Pee Dee section. It is planned to locate a third station in the Sand Hill section of the State as soon as the college has funds for this extension.

The Boll Weevil Control.—Laboratories are located at the Pee Dee station in Florence. This work is carried out in cooperation with the U. S. Department of Agriculture and is of untold value to the state.

These stations are devoted primarily to experimental work. They also form centers of dissemination for the information which the college has to give to the people.

EXPERIMENT STATION STAFF

- H. W. BARRE, A. M., Botanist and Director.
C. C. NEWMAN, B. S., Horticulturist.
R. O. FEELEY, D. V. S., Consulting Veterinarian.
A. B. BRYAN, B. S., B. Litt., Agricultural Editor.
L. V. STARKEY, M. S., Animal Husbandman.
J. P. LaMASTER, B. S., Agr., Dairyman.
R. N. BRACKETT, Ph. D., Chemist.
FRANKLIN SHERMAN, M. S., Entomologist.
C. S. PATRICK, B. S., Head Farms Division.
R. E. CURRIN, Supt. of Pee Dee Experiment Station, Florence, S. C.
J. A. RILEY, M. S., Supt. of Coast Experiment Station, Summerville, S. C.
G. M. ARMSTRONG, Ph. D., Head of Division of Boll Weevil Control,
Florence, S. C.
J. H. MITCHELL, M. S., Chemist.
C. A. LUDWIG, Ph. D., Associate Botanist and Plant Pathologist.
G. H. AULL, B. S., Assistant to Director of Research.
T. S. BUIE, B. S., Acting Head Agronomy Division.
J. A. BERLY, B. S., Associate Horticulturist.
E. E. HALL, M. S., Agronomist Boll Weevil Control, Florence, S. C.
W. B. ROGERS, B. S., Assistant Agronomist.
C. B. NICKELS, M. S., Research Assistant Entomologist.
E. D. KYZER, B. S., Research Assistant, Florence, S. C.
G. H. AULL, B. S., Assistant to Director of Research.
W. C. JENSEN, M. S., Specialist in Agricultural Economics.
R. W. MORELAND, M. S., Assistant Entomologist*, Florence, S. C.
F. A. FENTON, Ph. D., Entomologist Boll Weevil Control*, Florence, S. C.
B. A. RUSSELL, M. S., Assistant in Farm Economics.
E. W. DUNNAM, M. S., Assistant Entomologist, Boll Weevil Control*,
Florence, S. C.
J. D. WARNER, M. S., Assistant Agronomist.
K. S. MORROW, M. S., Assistant Dairyman.
A. L. DuRANT, M. S., Assistant Animal Husbandman.
C. O. EDDY, M. S., Associate Entomologist.
L. M. FENNER, M. S., Assistant Pathologist.†
O. L. CARTWRIGHT, M. S., Assistant Entomologist.
BURNS GILLISON, Foreman Experiment Station Farm.

*Detailed by United States Department of Agriculture.

†S. C. State Crop Pest Commission.

Mail and Telegraph Offices: Clemson College, S. C.

Freight and Express Offices: Calhoun, S. C.

The bulletins and circulars of the Station are issued at irregular intervals and are sent free to all citizens of the state who apply for them.

LIVESTOCK SANITARY WORK

The Clemson College Live Stock Sanitary Office is a department of Clemson College and is under the supervision of the Agricultural Committee of the Board of Trustees. This office is located in Columbia, S. C., in order that the best interests of the livestock industry may be served, and is in charge of the State Veterinarian, Dr. W. K. Lewis, who is also Director of this Department.

The principal functions of this office are: Tick Eradication, Tuberculosis Eradication and Hog Cholera Control. In addition to these, all reported outbreaks of contagious, infectious and communicable diseases of live stock are investigated, and measures recommended for the control and eradication of the specific condition; and quarantine is maintained against the introduction of diseased livestock into the State.

The Columbia office has recently established a fully equipped laboratory for bacteriological and pathological work, in order that proper and prompt diagnosis of certain diseases may be made. Parasitic research work will be conducted in various sections of the State in connection with the Columbia laboratory

In addition to the force of veterinarians working out from the Columbia office, Assistant State Veterinarians are located at strategical points in the State so as to be readily available to the farmers in their respective territories.

On July 1, 1925, twenty-two (22) practicing veterinarians of the State were commissioned as Deputy State Veterinarians, to assist the State Veterinarian in the control and eradication of contagious and infectious diseases of livestock. The Deputy State Veterinarians are located principally in the northern and eastern sections of the State, and with the Assistant State Veterinarians located in the middle and southern sections of the State, the Clemson College Live Stock Sanitary Office is in position to render a service to the livestock industry of the State in keeping with its development and maintain the service to the highest degree of efficiency.

The Clemson College Live Stock Sanitary Office also maintains an equipment for handling large stocks of anti-hog cholera serum, virus and veterinary biologics and furnishes these products to the citizens of the State at cost, thereby effecting a saving to them of several thousands of dollars annually.

The live stock sanitary work is required by legislative enactment and is supported by legislative appropriations.

The Bureau of Animal Industry, U. S. Department of Agriculture co-operates in Tick Eradication, Tuberculosis Eradication, and Hog Cholera Control, and duplicates the amounts appropriated by the State Legislature for these projects.

List of employees engaged in livestock sanitary work:—

State Veterinarian and Director.—W. K. Lewis.

Laboratory Veterinarian.—R. A. Mays.

Assistant State Veterinarians—E. T. Fisher, H. B. Hood, W. D. McCormack, F. K. Peterson, S. D. Shoulkin, S. M. Witherspoon, Jr., M. L. Boyd.

Clerks.—R. K. Donly, J. E. Wilson, J. M. Leaphart.

Deputy State Veterinarians.—R. M. Bailey, W. A. Barnette, M. R. Blackstock, F. P. Caughman, J. T. Dixon, H. P. Dyches, Louis Friedham, H. L. Frieze, R. H. Glenn, L. J. Hogan, J. E. Hollis, O'Neal Jacobs, T. B. Jacobs, T. J. Kinard, F. E. Kitchen, G. J. Lawhorn, W. K. Magill, J. H. Morse, Benj. McInnes, B. K. McInnes, E. P. Stanton, B. C. Talley.

MISCELLANEOUS PUBLIC SERVICE

Fertilizer Inspection and Analysis.—The work of fertilizer inspection and analysis is under the supervision of the Board of Control consisting of ex-Governor Richard I. Manning, chairman J. E. Wannamaker of St. Matthews, J. J. Evans, Bennettsville. The work of inspection is under the immediate supervision of H. M. Stackhouse, Secretary of the Board of Control.

There are inspectors to look after this feature of the work in different parts of the State.

The work of analysis is carried on in the Fertilizer Analysis Division of the Chemical Department and is under the supervision and direction of Dr. R. N. Brackett, Chief Chemist.

The work consists of the analysis of commercial fertilizers as provided for by the Fertilizer Law of the State. This Division also undertakes the analysis of waters, ores, minerals, and other naturally occurring materials, except soils (which are analysed by the Experiment Station), portions of human bodies in cases of suspected poisoning, as provided for by law, and the analysis of home-mixed fertilizers. All the work of this Division is done free of charge.

Entomological and Pathological Inspection.—This work is carried on under the direction of the State Crop Pest Commission.

The State Entomologist is Prof. F. Sherman, head of the division of Entomology, and the State Pathologist is H. W. Barre, head of the division of Botany and Bacteriology.

The work of these officers consists of the control of contagious plant diseases and insect pests. The State Entomologist has also supervision of all nursery stock sold within the State.

A permit tag issued by the State Crop Pest Commission should be attached to every package of nursery stock seed or plants offered for sale or shipment for planting purposes.

Agricultural and Textile Scholarships.—The college maintains 170 four-year agricultural and textile scholarships, and fifty-two one-year agricultural scholarships. Each scholarship is worth \$100 and free tuition. The cost of these scholarships is paid out of the fertilizer tax, as the State makes no appropriation therefor.

The annual cost of these scholarships, including advertising, expense of holding examinations, etc., is about \$20,000.00.

School Houses.—The college also furnishes free plans and specifications for rural school buildings to school trustees desiring to erect a new school house, and will advise and furnish drawings for alterations of old school houses. This work was undertaken at the request of and under the direction of the State Superintendent of Education. Further information and a copy of a bulletin on "Rural School Buildings" will be furnished by Rudolph E. Lee, college architect, upon request.

Miscellaneous.—In addition to the above regular lines of activity, the College manufactures at cost the **South Carolina flag in a number of different sizes**, makes annually an exhibit at the **State Fair**, and engages in other miscellaneous activities.

PART IX.—REGISTER

The Corps of Cadets.

1925-1926.

UNITED STATES ARMY PERSONNEL.

Lieutenant Colonel Otis R. Cole	Infantry.
Captain Henry W. Lee	U. S. A. Retired
Captain Arthur W. Penrose	Infantry.
Captain Ernest A. Higgins	Infantry.
First Lieutenant Richard W. Johnson	Infantry.
First Lieutenant Paul G. Balcar	Infantry.
First Sergeant Jesse M. Peck	Detached Enlisted Men's List
Sergeant Archie D. Stern	Detached Enlisted Men's List.
Sergeant Gilbert E. Naramor	Detached Enlisted Men's List

CADET REGIMENTAL ORGANIZATION.

Colonel G. I. Finklea
 Lieutenant Colonel W. J. Douglas
 Captain J. B. Caughman, Adjutant
 Captain W. R. Roy, Supply Officer
 Captain W. W. Bryan, Intelligence Officer
 Captain E. H. Jordan, Chaplain
 First Lieut. E. T. Smith, C. O. of Drum and Bugle Corps
 Master Sergeant J. H. Baker, (Reg'l. Sgt. Major)
 Master Seageant L. A. Seaborn, (Reg'tl. Sup. Sgt.)
 Color Seargeant C. C. Newman
 Color Seargeant J. A. Warren

BAND

Captain	D. R. Ergle.
First Lieutenant	H. E. Gaffney.
First Lieutenant	P. Strickland.
Second Lieutenant	G. W. Gignillant.
Drum Major	J. R. Cooper.
Sergeant	W. C. Brown.
Seageant	L. E. Cromer.
Corporal	J. H. Clarke.
Corporal	W. C. Hutchins.
Corporal	G. G. Simmons.
Corporal	W. P. Timmerman.

FIRST BATTALION

Major J. E. Westbury
 First Lieutenant, Adjutant T. G. Jackson
 Staff Sergeant F. J. Fishburne

Co. A**Co. B****Co. C****Co. D****CAPTAINS**

Wray, J. Q. Coleman, H. C. Trimmier, L. G. McKerley, J. B.

FIRST LIEUTENANTS

Thackston, A. J. White, W. J. Hendrix, S. H. Walker, J. E.
 Smith, B. M. Shands, W. A. Smith, G. A. Powles, H. J.

SECOND LIEUTENANTS

Hinson, H. S. Foster, R. M. Evans, J. K. Hane, W. W.
 McGee, E. T. Smyth, J. A. Boyd, J. K. Hane, J. K.

FIRST SERGEANTS

Ross, D. H. Parler, M. L. McTeer, J. R. Greene, J. W.

SERGEANTS

Brock, J. L. Cain, R. H. Felder, J. C. Cureton, R. H.
 Kershaw, J. Hicks, M. H. Caughman, E. M. Herron, J. L.
 Gibson, D. A. James, J. H. Donaldson, J. H. Hinnant, J. L.
 Russell, H. E. Stoutemire, H. L. Hendrix, J. H. Rose, A.
 Sams, R. O. Smith, C. T. Youngblood, J. E. Scott, J. T.

CORPORALS

Davidson, L. S. Allison, H. M. Berry, L. E. Cato, J. B.
 Glaze, C. H. Bell, J. L. Dozier, J. P. Bryan, C. A.
 Green, C. D. James, W. C. Eadie, M. D. Clark, W. H.
 McCutchin, G. H. Jones, J. A. Ginn, R. J. Fowler, B. R.
 Pickens, R. O. Hicks, J. O. James, F. G. Hewlett, L. M.
 Sanders, H. I. Parker, W. E. Taylor, H. K. Maner, W. F.
 Waller, P. F. W. Pruitt, W. R. Watson, E. G. Rutledge, J. R.
 Williams, W. T. Wingard, B. F. Stewart, T. C.

SECOND BATTALION

Major E. R. Alexander
 First Lieutenant, Adjutant J. M. Law
 Staff Sergeant R. H. Mitchell

Co. E

Co. F

Co. G

Co. H

CAPTAINS

Wells, S. F.

Garrison, N. A.

McGill, N. A.

Sanders, J. H.

FIRST LIEUTENANTS

Tison, P. H.

Byrd, H. L.

Day, C. B.

Elliott, W. R.

Fewell, J. A.

Sudlow, W. H.

Cobb, C. N.

Pauling, J. R.

SECOND LIEUTENANTS

Brown, H. A.

Tinsley, H. K.

McCormac, E. L.

Mayfield, J. T.

Smith, R. E.

Darby, J. M.

Pruitt, J. M.

Palmer, E. D.

FIRST SERGEANTS

Milling, J. A.

Bradham, H. K.

West, C. P.

Marshall, R. M.

SERGEANTS

Brodie, G. H.

Anderson, R. D.

Adams, J. W.

Austin, P. B.

Cash, D. H.

Baker, W. L.

Earle, J. W.

Bryce, G. W.

Martin, W. T.

McDaniel, S. W.

Little, T. R.

Carter, T. H.

Reynolds, C. M.

Pickelsimer, D. L.

Rogers, C. M.

McLeod, C. E.

Whilden, C. M.

Turner, C. M.

Smith, T. E.

Smoke, G. W.

CORPORALS

Boseman, J. C.

Dargen, W. C.

Burley, J. E.

Bryce, G. T.

Burgess, R. H.

Jones, M. A.

Crook, M. D.

Cunningham, J. W.

Covington, J. B.

Klugh, G. F.

Evans, J. C.

Dick, G. W.

Godfrey, A. B.

Miller, E. E.

Hicks, J. R.

Hightower, R. E.

McPhail, J. W.

Mundy, J. T.

Link, A. C.

Manning, F. C.

Marchbanks, J. C.

Turner, W. B.

Smith, T. W.

Lipscomb, R. W.

Owens, S. G.

Talbert, S. C.

Tuten, W. A.

Rees, H. F.

White, R. B.

THIRD BATTALION

Major E. M. Salley
 First Lieutenant, Adjutant F. B. Leitzsey
 Staff Sergeant S. R. Alexander

CAPTAINS

Co. I	Co. K	Co. L	Co. M
Price, L. C.	Farmer, W. A.	Stewman, W. S.	Hope, R. H.

FIRST LIEUTENANTS

Roche, A. O.	Jones, W. L.	Epting, J. C.	Bradley, T. L.
Davis, J. A.	Greene, G. H.	Steer, R. D.	Cudd, J. E.

SECOND LIEUTENANTS

Thomas, H. L.	Hawkins, C. E.	Trent, R. L.	Haskell, A. C.
	Gilmer, F. S.	McCraw, L. G.	Smith, J. R.

FIRST SERGEANTS

Garrison, R. H.	Haskell, A. C.	Berry, W. J.	Avent, J. K.
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SERGEANTS

Dobson, C. R.	Corbett, T. S.	Bailes, J. M.	Adams, L. C.
Page, W.	Grice, H. S.	Etheridge, T. J.	Chapman, W. E.
Lee, S. A.	Gillespie, S. L.	Jones, R. C.	DuPre, G. C.
Massey, L. B.	Hayden, E. C.	King, E. H.	Long, E. M.
Stephenson, J. A.	Valentine, J. G.	Rickborn, J. H.	Thomas, J. R.

CORPORALS

Britt, C. E.	Abbott, W. B.	Bickley, B. L.	Campbell, T. A.
Cuttino, B. H.	Blakeney, C. R.	Carter, W. H.	Ellis, E. S.
Hudgens, W. W.	Carter, S. T.	Harrell, J. C.	Mercer, C. W.
Midkiff, R. B.	Dunlap, G. H.	Herring, W. H.	Pressley, W. H.
Thompson, Z. V.	Fishburne, J. G.	Martin, S. P.	Ramsey, W. T.
Whilden, J. E.	Lesesne, F. F.	Mealing, J. P.	Schaefer, W. B.
Wylie, A. P.	Philpot, C. P.	Stevenson, R. C.	Turner, J. A.
		Stoppelbein, H. E.	Welborn, M. B.

DEGREES AWARDED JUNE 2, 1925

BACHELOR OF SCIENCE

AGRICULTURE

John Callahan Bagwell	Honea Path	John Hugh McCormac	Dillon
Thomas Albert Barrs	Orangeburg	Frank Calhoun McLees	Townville
Emory Wood Brockman	Columbia	Neil Alexander McLeod	Bingham
Luther Gordon Causey	Tarboro, N. C.	Thomas Eugene McLeod	Bingham
Wade Hampton Cobb	Columbia	Miyauoto McPhail	Townville
John Franklin Corbin	Greenville	Kenneth Murrell Mace	Mullins
William Herbert Craven	Gresham	James Robertson Miller	York
Derrill McCollough Daniel	Cooper	Dewey LeRoy Outen	Kershaw
George Carroll Edens	Pickens	James Floyd Rush	Greenwood
Barton Woodward Freeland	Crowley, La.	Edward Sanders, Jr.	Okatee
William Anderson Hambright,	Kings Creek	Kenneth Black Sanders	Walterboro
Thomas Jehu Hart	Vance	Julius Augustus Shanklin	Green
Graham Edward Hawkins	Timmons ville	Drayton Edgeworth Smith	Kinards
Harold Jasper Henderson	Greer	Richard Hallum Smith	Smoaks
Edward Samuel Herlong	St. Matthews	John Townsend Stevens ...	Youngs Island
Joseph Simpson Holmes	Mountville	Kenneth Ervin Stokes	Darlington
Waldo Carroll Huffman ...	Little Mountain	Paul DeWees Stoney	Allendale
Sam Lucius Jackson	Anderson	David Warren Stribling	Westminister
George Leroy Jones	Mullins	John Lawrence Sutherland	Pickens
Julian Howell Keel	Allendale	Edward Holmes Talbert	Edgefield
John William Kibler	Pomaria	John Newton Todd	Walhalla
Chester Brooklyn King	Myrtle Beach	William Carroll Traxler	Bowman
Jesse Monroe Lewis	Darlington	William Fletcher Welch	Clio
Charles Amos Long	Conway	John G. Williamson	Tabor, N. C.
Elias Alford McCormac	Dillon	Maxwell Youmans	Fairfax

ARCHITECTURE

David Cox Ayers	Orangeburg	Noah Patrick Shealey	Newberry
Reginald Leon Dicks	Lakeland Fla.	Bert Monroe Spencer	Madison
Marion Britton Kirton	Cades	Harry Robert Woodside	Gaffney

CHEMISTRY

William Nathaniel Simpson	Richburg
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CIVIL ENGINEERING

William Brevard Bailes	Fort Mill	John DeLeon Matthews	Cowart
Jacob William Bauer	Columbia	Lucius Hopkins Melton	Chester
James William Blair	Blair	Harry Franklin O'Cain	Orangeburg
Fred Edward Buck	Sumter	Donald Roark	Pickens
Edgar Allen Cannon	Blythewood	Daniel Adolph Sanftleben,	Brooklyn, N. Y.
Horace Victor Coleman	Silver Street	Elton Counts Sease	Prosperity
Joe Maud Coleman	Silver Street	Edwin Clarke Stewart	Pelzer
Charles Milton Littlejohn	Belton	Ralph Epting Sease	Prosperity
Earl Aldon Thompson	Reevesville		

TEXTILE ENGINEERING

Perrin Watson Coleman	Greenville	Julian McLauren Longley	LaGrange, Ga.
William Clarence Freeman	Greenville	Henry David Mullins	Gaffney
Samuel Ellsworth Harmon	Columbia	Thomas Herbert Pope	Greenville
William Thomas Knotts	North	James Marshall Shape, Jr.	Leslie
John Caldwell Lake ...	Wake Forest, N. C.	Allen Boyd Tennant	Winnsboro

ELECTRICAL ENGINEERING

Clarence Monroe Asbill, Jr.	Columbia	David Oscar Herbert	Orangeburg
Jack Babb	Pelzer	David Felder Hutto	Denmark
Samuel Lewis Bell	Chester	Lee Rothschild William Jacobi, Greenville	
Lewis Boyd Blakeney	Lancaster	Robert Earle Maxwell	Columbia
Thomas Andrew Bonner	Pacolet	Percy Whitton Moore	Florence
Robert Lemuel Bunch	Charleston	Brown Lewis Murr	Chester
Franc's Linden Cary	Seneca	Samuel Nathaniel Patterson	Williamson
Jack Willard Chandler	Sumter	George Elvin Price	Bamberg
James Edgar Darby	Lowryville	Carlton Fuller Rhodes	Darlington
Edwin Gibson Fletcher	McColl	Robert Bright Roark	Pickens
Bryan Burroughs Gillespie	Seneca	Henry Dempsey Sally	Salley
Paul Graves	Abbeville	Ralph Homer Tibbs	Great Falls
Robert Elliott Hall	Gaffney	Charles Eugene Welling, Jr.	Charleston
James Cloud Harden	Chester	Henry Carl Wieters	Charleston
Shala Walter Henry	Timmons ville		

GENERAL SCIENCE

John Roder'ck Heller

Seneca

MECHANICAL ENGINEERING

Irvin Walker Chappell	Jenkinsville	Clinton Jackson McGraw*	Sumter
Alester Garden Holmes	Clemson College	Edward Jasper Poe, Jr.	Central
Francis Cornwall Jennings	Winnsboro	Ralph Samuel Pruitt	Anderson
Charles Stanley Johnson, Terre Haute, Ind.		John Alvin Seago	Greenwood
William Marion Lewis	Darlington	James Daniel Stewart, Jr.	Florence

*Also Electrical Engineering.

TEXTILE INDUSTRIAL EDUCATION

Lee Roy Blakeney	Pageland	John Allen Morris	Newry
Leonard Rowland Brooker, Charlotte, N. C.		Joseph Jephtha Norton, Jr	Walhalla
Eugene Franklin Cartee	Liberty	Charles Alexander Robinson, Jr. Winnsboro	
Folsom Hume Colbert	Ardmore, Okla.	Thomas Geddings Roche	Abbeville
Hoyt Bethea Flowers	Darlington	Earle Lewis Smith	Anderson
Thomas Edwin Goodale, Jr.	Camden	Joseph Elihu Smith	Ridgeville
Irby Major Gore	Newberry	Malcolm McRae Smith	Clon
Baxter Manley Hayes	Anderson	Harold Simmons Tate	Abbeville
Charles Riley Haynsworth	Sumter	John Harrington Thrower	Cheraw
Rowland Linwood Lee, Jr.	Landrum	William Bratton Williams	Greenville
John Joseph Lyons	Anderson	Gary Cortez Wilson	Honea Path

OTHER DEGREES AWARDED JUNE 2, 1925**BACHELOR OF SCIENCE****CHEMISTRY**

L. P. Thackston, M. D.

AGRICULTURE

D. Lesesne Smith, M. D.

ENGINEERING

J. M. Neil, M. D.

REGISTER OF STUDENTS

Abbreviations: A-Agriculture unclassified; the numerals I, II, etc. following the letter A, indicate the majors listed on pages 52, 53; ARCH-Architecture; C-Chemistry; CheE-Chemical Engineering; CE-Civil Engineering; E-Engineering unclassified; EE-Electrical Engineering; ME-Mechanical Engineering; T-Textile Engineering; TE-Textile Industrial Education; GS-General Science.

DEGREES CONFERRED 1926

SENIOR CLASS

County and city are the same if street only is given.

Name and Course	County	Residence
Alexander, E. R. (AVII)	Lancaster	R. 2, Fort Mill
Anderson, O. S. (ME)	Darlington	R. 2, Timmons ville
Bailey, T. L. W. (AIV)	Laurens	Clinton
Barr, C. M. (CE)	Lexington	Leesville
Batson, J. P. (T)	Greenville	1425 Augusta Rd.
Bauknight, L. S. (CE)	Saluda	R. 2, Batesburg
Boseman, T. R. (ME)	Darlington	R. 4, Darlington
Bowles, H. J. (EE)	Greenwood	Greenwood
Boyd, J. A. (T)	Laurens	Chestnut St.
Bradley, T. L. (C)	Richland	2825 Blossom St., Columbia
Brown, H. A. (AV)	Oconee	R. 3 Westminister
Bryan W. W. (CE)	Oconee	Clemson College
Byrd, H. L. (EE)	Orangeburg	North
Cain, R. H. (AV)	York	Sharon
Calvert, J. P. (ME)	Union	Jonesville
Carpenter, E. W. (T)	Greenville	514 College St.
Carson, J. W. (ME)	Spartanburg	283 S. Church St.
Carter, D. E. (T)	Laurens	Clinton
Caughman, J. B. (CE)	York	Rock Hill
Chapman, W. E. (Arch.)	Anderson	R. 2, Pendleton
Cobb, C. N. (GS)	Pickens	Easley
Coleman, H. C. (AII)	Richland	Hopkins
Corn, H. E. (EE)	Anderson	701 West End Ave.
Cox, F. M. (ME)	Anderson	Belton
Cox, H. A. (EE)	Calhoun	St. Matthews
Cox, G. W. (ME)	Spartanburg	R. 1, Greer
Cox, S. M. (EE)	Oconee	R. 3, Seneca
Cudd, J. E. (Arch.)	Union	Jonesville
Cuiler, F. N. (AV)	Lexington	Swansea
Darby, J. M. (TE)	Anderson	Sandy Springs
Davis, J. A. (EE)	Sumter	515W. Oakland Ave.
Day, C. B. (EE)	Edgefield	R. 1, Trenton
Douglass, W. J. (AI)	Union	Jonesville
Elliott, W. R. (TE)	Fairfield	Winnsboro
Epting, J. C. (AI)	Newberry	Little Mountain
Ergle, D. R. (C)		Augusta, Ga.
Evans, J. K. (ME)	Beaufort	Beaufort
Ezell, P. B. (AV)	Pickens	Calhoun
Farmer, W. A. (AVI)	Anderson	649 North Ave.
Fewell, J. A. (TE)	York	Rock Hill
Finklea, G. I. (EE)	Florence	R. 3, Hyman
Fleming, J. M. (AV)	Laurens	Lanford
Foster, R. M. (AV)	Spartanburg	White Stone

Name and Course	County	Residence
Gaffney, H. E. (EE)	Cherokee	Gaffney
Garrison, C. R. (AV)	Oconee	Seneca
Garrison, N. A. (EE)	Anderson	Sandy Springs
Gignilliat, G. W. (T)	Oconee	Seneca
Gilmer, F. S. (TE)	Anderson	Anderson
Green, G. H. (EE)	Greenville	R. 4 Greer
Hall, F. B. (ME)	Anderson	Iva
Hane, J. K. (AVII)	Calhoun	Fort Motte
Hane, W. W. (AVII)	Calhoun	St. Matthews
Harrelson, O. M. (EE)	Horry	Loris
Hawkins, C. E. (C)	Anderson	Starr
Heller, W. F. (EE)	Anderson	Sandy Springs
Hendrick, S. H. (TE)	Lexington	Lexington
Henery, W. T. (AVII)	Union	Sedalia
Hester, J. B. (C)	Pickens	R. 2 Easley
Hinson, H. S. (AVII)	Lee	Lynchburg
Hope, R. H. (TE)	York	Rock Hill
Jackson, R. A. (AV)	Anderson	R. 7, Anderson
Jackson, T. G. (TE)	Florence	507 S. Brown St.
Jones, W. L. (EE)	Greenville	Greer
Jordan, E. H. (AVII)	Darlington	R. 5, Timmons ville
Jordan, R. C. (AV)	Chester	R. 3. Richburg
Kearse, F. G. (EE)	Hampton	Crocketville
King, B. D. (EE)	Lexington	R. 2, Swansea
Kizer, H. F. (AV)	Dorchester	St. George
Law, J. M. (AI)	Florence	Darlington
Leitsey, F. B. (C)	Richland	906 Columbia Ave., Columbia
Lemmon, J. M. (AII)	Lee	Lynchburg
Li, Ko Chia (IEd)		Mukden, China
Long, L. S. (AII)	Newberry	R. 3, Prosperity
McAllister, L. C. (VII)	Anderson	Pendleton
McClellan, G. W. (IV)	Anderson	Anderson
McCormac, E. L. (TE)	Dillon	R. 1, Dillon
McCraw, L. G. (AI)	Cherokee	Gaffney
McGee, E. T. (CE)	Anderson	R. 2, Starr
McGill, C. A. (ME)	Anderson	143 Sayre St.
McKerley, J. B. (CE)	Barnwell	R. 2, Elko
McKeown, S. M. (TE)	Chester	R. 1, Cornwell
Maner, J. K. (AII)	Hampton	Garnett
Martin, B. V. (EE)	Oconee	Clemson College
Mayfield, J. T. (EI I. Ed.)	Bamberg	Denmark
Mobley, F. B. (AV)	Lancaster	Heath Springs
New, C. A. (T)	Greenville	R. 5, Greenville
Padgett, A. B. (AV)	Bamberg	Bamberg
Palmer, E. D. (EE)	Pickens	Central
Paulling, J. R. (AIV)	Calhoun	St. Matthews
Porter, L. A. (TE)	Orangeburg	Springfield
Price, L. C. (EE)	Bamberg	Bamberg
Pruitt, J. M. (TE)	Anderson	R. 1, Anderson
Roche, A. O. (EE)	Abbeville	Abbeville
Rogers, C. H. (AI)	Marion	R. 1, Mullins
Roy, W. R. (C)	Richland	2205 Gadsden St., Columbia
Salley, E. M. (ME)		Saluda, N. C.

Name and Course	County	Residence
Sanders J. H. (T)	Chester	Chester
Sanders, J. R. (ME)	Chester	Chester
Sanders, V. C. (EE)	Newberry	Newberry
Shands, W. A. (AVI)	Florence	Ebenezer
Sherman, F. (AVI)	Oconee	Clemson College
Simpkins, L. H. (AVII)		Augusta, Ga.
Smith, B. M. (CE)	Anderson	Starr
Smith E. T. (ME)	Anderson	Anderson
Smith, J. R. (EE)	Greenville	310 Perry Ave.
Smith, R. E. (Arch.)	Cherokee	Blacksburg
Smyth, J. A. (AII)		Hendersonville, N. C.
Steer, R. D. (AIV)	Laurens	Clinton
Stevenson, N. W. (EE)	Anderson	1128 S. Main St.
Stewman, W. S. (EE)	Lancaster	Lancaster
Strickland, P. (AV)	Anderson	Belton
Sudlow W. H. (EE)	Aiken	2117 Barnwell Ave.
Taylor, W. H. (T)	Laurens	Laurens
Thackston, A. J. (EE)	Orangeburg	Orangeburg
Thomas, H. L. (AIII)	Sumter	Mayesville
Tinsley, H. K. (AI)	Greenwood	Hodges
Tison, P. H. (AVII)	Allendale	Allendale
Todd, J. A. (ME)	Anderson	Starr
Tozier, L. R. (Arch)	Sumter	Sumter
Trent, R. L. (AV)	Spartanburg	Clifton
Trimmier, L. G. (TE)	Spartanburg	R. 6, Spartanburg
Turner, G. E. (En. I Ed)	Anderson	Anderson
Walker, J. E. (CE)	Barnwell	Blackwell
Watson, J. R. (ME)	Saluda	Batesburg
Watson, S. J. (A)	Edgefield	Johnson
Wells, S. F. (AV)	Sumter	R. 5, Sumter
Westbury, J. E. (EE)	Georgetown	Georgetown
White, W. A. (AIII)	Chester	Chester
Wray, J. Q. (EE)	York	York
Wright, J. B. (EE)	Fairfield	Shelton
Zagora, O. F. (ME)		Charlotte, N. C.

JUNIOR CLASS

County and city are the same if street only is given.

Name and Course	County	Residence
Adams, J. W. (CE)		Jemison, Ala.
Adams, L. C. (CE)	McCormick	Meriweather
Alexander, S. R. (A)	Anderson	101½ E. Whitner St.
Anedrson, R. D. (A)	Marlboro	Bennettsville
Askins, H. W. (E)	Florence	R. 3, Timmons ville
Aull, J. L. (CE)	Newberry	Pomaria
Austin, P. B. (CE)	Greenville	308 Townes St.
Avent, J. K. (CE)	Marlboro	Bennettsville
Balles, J. M. (A)	Lancaster	R. 3, Fort Mill
Baker, J. H. (A)	Orangeburg	R. 3, Orangeburg
Baker, W. L. (A)	Chesterfield	R. 1, Jefferson
Baldwin, H. L. (E)	Orangeburg	Orangeburg

Name and Course	County	Residence
Beam, F. A. (A)	Anderson	Pelzer
Bennett, C. C. (A)	Pickens	Calhoun
Bennett, W. M. (GS)	Colleton	Ashton
Berry W. J. (CE)	Spartanburg	Wellford
Bethea, T. J. (A)	Marlboro	McColl
Bonnett, G. W. (A)	Saluda	Monetta R. 2
Bradham, H. K. (A)	Bamberg	R. 5, Bamberg
Breland, A. D. (A)	Colleton	Cottageville
Brock, J. L. (E)	Pickens	Central
Brodie, G. H. (E)	Aiken	R. 2, Sally
Brown, W. C. (GS)	Anderson	Belton
Brown, W. F. (E)	Anderson	Anderson
Bryce, G. W. (Arch.)	Florence	643 W. Evans St.
Buie, G. S. (CE)	Chesterfield	Patrick
Burley, F. A. (E)	Fairfield	Monticello
Burnett, W. E. (E)	Spartanburg	Wellford
Calhoun, W. B. (GE)	Allendale	Baldock
Cannon, J. P. (E)	Anderson	Honea Path
Carter, T. H. (TE)	Florence	R. 3, Timmons ville
Cash, D. H. (A)	Spartanburg	Chesnee
Caughman, E. M. (A)	Lexington	R. 6, Lexington
Causey, O. R. (A)		Chadbourn, N. C.
Chapman, A. H. (E)	Greenville	R. 4, Simpsonville
Chapman, H. (GE)	Pickens	Calhoun
Chapman, W. F. (A)	Anderson	R. 4, Belton
Chrietzberg, C. H. (TE)	Anderson	Williamston, R. 1
Coan, J. A. (E)	Spartanburg	Wellford
Cooper, J. R. (E)	Anderson	R. 4, Belton
Corbett, T. B. (E)	Colleton	Walterboro
Crain, M. C. (A)	Greenville	R. 1, Taylors
Cromer, L. E. (A)	Oconee	Seneca
Cromer, N. C. (A)	Anderson	R. 2, Belton
Cullum, F. E. (CE)	Lexington	Batesburg
Cunningham, W. R. (E)	Lee	R. 9, Bishopville
Cureton, R. H. (CE)	Greenville	808 Pendleton St.
DeYoung, D. F. (Arch.)	Anderson	Belton
Dial, W. A. (E)	Laurens	Cross Hill
Dill, R. C. (E)	Greenville	Dorsey Ave.
Dobson, C. R. (Arch.)	Lancaster	Lancaster
Donalson, J. H. (Arch.)	Georgetown	Georgetown
Dorn, T. E. (A)	Greenwood	R. 4, Greenwood
Dowling, C. B. (E)	Lexington	Swansea
Duggan, O. R. (E)	Oconee	Seneca
DuPre, G. C. (E)	Richland	1820 Pendleton St., Columbia
Earle, J. E. (CE)	Anderson	R. 2, Starr
Etheridge, T. J. (E)	Lexington	Batesburg
Faust C. C. (E)	Bamberg	Denmark
Felder, J. C. (E)	Sumter	Sumter
Fishburne, F. J. (E)	Charleston	62 N. Alexander St.
Franklow, M. L. (E)	Lexington	Leesville
Garnett, J. K. (A)	Hampton	R. 1, Garnett
Garrison, R. H. (A)	Anderson	Sandy Springs
Gaston, L. D. (E)	Spartanburg	Reidsville

Name and Course	County	Residence
Gerrard, F. H. (A)	Anderson	R. 4, Anderson
Gibson, D. A. (I Ed)		Morrisville, N. C.
Gillespie, S. L. (E)	Darlington	R. 3, Hartsville
Gilmore, H. S. (GS)	Orangeburg	Holly Hill
Goff, H. B. (A)	Saluda	R. 4, Leesville
Goodyear, C. P. (A)	Marion	R. 1, Nichols
Googe, W. J. (E)	Allendale	Fairfax
Greene, J. W. (E)	Greenville	Dunean Mills
Grice, H. S. (A)	Saluda	R. 2, Ward
Hall, J. H. Arch.)	Cherokee	Gaffney
Harmick, F. G. (AEd)	Cherokee	R. 9, Gaffney
Hardee, J. H. (E)	Florence	Florence
Haskell, A. C. (A)		R. 4, Augusta, Ga.
Hayden, E. C. (A)	Orangeburg	Cope
Hayden, T. J. (CE)	Chester	Great Falls
Hendee, M. H. (E)		Augusta, Ga.
Hendrix, T. J. (CE)	Spartanburg	R. 1, Duncan
Herron, J. L. (A)	Anderson	Starr
Hicks, M. H. (E)	Darlington	Hartsville
Hinnant, J. L. (E)	Richland	R. 3, Blythewood
Hutto, S. G. (A)	Bamberg	Denmark
James, J. H. (A)	Greenville	R. 4, Greer
Johnson, W. P. (E)	Spartanburg	R. 1, Inman
Jones, O. F. (A)	Pickens	R. 1, Easley
Jones, R. C. (CE)	Bamberg	Bamberg
Jones, W. E. (A)	Kershaw	R. 2, Bethune
Keenan, H. E. (Arch.)	Aiken	Graniteville
Kent, G. P. (CE)		Bloomfield, N. J.
Kershaw, J. E. (E)		Augusta, G. A.
Keyserling, L. L. (EE)	Beaufort	Beaufort
Kinard, F. W. (C)	Lexington	Leesville
King, J. N. (CE)	Cherokee	Gaffney
Kitchen, T. W. (TE)	Greenville	Greenville
Knight, J. D. (E)	Chesterfield	Angelus
Lee, S. A. (E)	Orangeburg	Orangeburg
Lenhardt, B. F. (A)	Pickens	Easley
Liles, S. E. (CE)	Marlboro	McColl
Little, T. R. (CE)	Anderson	R. 2, Starr
Long, E. M. (E)	York	Rock Hill
McCracken, H. E. (A)	Richland	R. 1, Hopkins
McDaniel, S. W. (Arch.)	Beaufort	Beaufort
McDaniel, W. C. (A)	Florence	R. 5, Timmons ville
McLeod, C. E. (A)	Beaufort	Beaufort
McHugh, R. S. (A)	Oconee	Clemson College
McKemie, W. J. (T)		Atlanta, Ga.
McMillan, F. W. (TE)	Marion	Mullins
McTeer, J. R. (E)	Colleton	Walterboro
Major, J. D. (A)	Anderson	R. 2, Belton
Mangum, W. S. (A)	Marlboro	R. 1, McColl
Marshall, R. M. (E)	Beaufort	Beaufort
Martin, W. T. (A)	Spartanburg	Chesnee
Massey, L. B. (A)	Anderson	R. 2, Pendleton
Maxwell, W. C. (A)		R. 1, Rydal, Ga.

Name and Course	County	Residence
Meredith, P. F. (Arch.)	Pickens	Central
Metz, G. E. (GS)	Charleston	1, Montague St.
Miley, P. (A)	Hampton	R. 1, Brunson
Miller, L. R. (E)	Marlboro	Bennettsville
Miller, P. H. (TE)	Marlboro	Tatum
Milling, J. A. (E)	Greenwood	Greenwood
Mitchell, R. H. (E)	Aiken	N. Augusta
Newman, C. C. (A)	Oconee	Clemson College
Nichols, W. D. (E)	Anderson	Pelzer
Page, W. (A)	Horry	R. 1, Gallivant's Ferry
Pardue, W. A. (T)	Edgefield	R. 3, Trenton
Parler, M. L. (Arch.)	Sumter	Wedgiefield
Parnell, C. L. (A)	Jasper	Gillisonville
Phillips, C. Y. (CE)	Pickens	Norris
Pickelsimer, D. L. (T)	Anderson	Piedmont
Pruitt, W. H. (A)	Anderson	R. 8, Anderson
Rasor, H. L. (A)	Greenwood	R. 1, Donalds
Reed, L. B. (A)	Anderson	R. 7, Anderson
Reynolds, C. M. (E)	Marlboro	Bennettsville
Rickborn, J. H. (A)	Dorchester	Reevesville
Robinson, S. O. (E)	York	York
Rogers, C. M. (GS)	Anderson	R. 1, Pelzer
Rosmond, J. E. (CE)	Greenville	R. 5, Greenville
Rose, A. (E)	Greenville	10 Washington Place
Ross, D. H. (CE)	Florence	Florence
Russell, H. E. (T)	Pickens	Easley
Sally, C. T. (CE)	Aiken	Sally
Sams, R. O. (E)	Union	Jonesville
Scott, J. T. (E)	Union	Jonesville
Seaborn, L. A. (CE)	Oconee	Walhalla
Sharp, G. W. (A)	York	R. 1, Leslie
Shore, F. W. (A)	Spartanburg	Greer
Skinner, T. B. (A)	Spartanburg	R. 3, Woodruff
Smith, C. T. (A)	Newberry	R. 1, Kinards
Smith, G. A. (T)	Anderson	1204 N. Main St.
Smith, S. T. (A)	Horry	R. 1, Conway
Smith, T. E. (CE)	Orangeburg	Rowesville
Smoak, W. G. (TE)	Calhoun	St. Matthews
Spencer, E. P. (A)		McFarlan, N. C.
Stephenson, J. A. (A)	York	R. 2, Sharon
Stogner, J. R. (TE)	Darlington	Hartsville
Stoutamire, H. L. (A)	Orangeburg	R. 3, Holly Hill
Sutherland, E. S. (CE)	Pickens	R. 4, Pickens
Swords, P. E. (GS)	Anderson	R. 1, Central
Sykes, L. C. (TE)	Orangeburg	Orangeburg
Talbert, J. H. (A)	McCormick	R. 1, McCormick
Tarrent, W. E. (T)	Greenville	Piedmont
Thomas, J. R. (E)	Orangeburg	R. 2, Cope
Thomson, D. P. (TE)	Oconee	Seneca
Tyler, R. T. (A)	Orangeburg	R. 3, Orangeburg
Valentine, J. G. (E)	Orangeburg	R. 3, Cope
Warren, J. A. (E)		Mount Vernon, N. Y.
Weathersbee, A. A. (A)	Aiken	R. 1, Ellenton

CLEMSON COLLEGE

Name and Course	County	Residence
Weigle, C. C. (A)	Anderson	R. 1, Belton
West, C. P. (TE)	Greenville	Greenville
West, W. (CE)	Spartanburg	278 N. Church St.
Whetsell, J. A. (A)	Orangeburg	Parler
Whilden, C. N. (CE)	Sumter	Sumter
White, A. H. (GS)	Greenville	R. 2, Simpsonville
Williamson, J. W. (A)	Dillon	R. 1, Hamer
Wilson, J. U. (E)		Villa Rica, Ga.
Yarborough, H. W. (A)	Fairfield	Jenkinsville
Youghblood, J. E. (A)	Barnwell	Elko

SOPHOMORE CLASS

County and city are the same if street only is given.

Name and Course	County	Residence
Abbott, W. B. (E)	Oconee	Walhalla
Acker, T. F. (GS)	Anderson	408 E. River St.
Adams, A. B. (E)		Sycamore, Ga.
Albergotti, J. E. (CE)	Oconee	Clemson College
Alexander, D. C. (CE)		Nashville, Tenn.
Allison, L. D. (Arch.)	Greenville	40 Rutherford St.
Anderson, J. B. (E)	Chester	Richburg
Anderson, M. H. (A)	Darlington	R. 2, Darlington
Anderson, R. N. (E)	Richland	719 Elmwood Ave. Columbia
Andrews, C. C. (CE)	Greenville	Fountain Inn
Atkinson, J. M. (Arch.)	Florence	Florence
Avent, J. J. (CE)	Marlboro	Bennettsville
Barron, W. H. (E)	York	York
Barton, L. S. (Arch.)	Orangeburg	R. 2, Orangeburg
Beach, A. K. (E)	Colleton	Walterboro
Bearden, C. E. (A)	Oconee	R. 4, Seneca
Beason, J. T. (A)	Greenville	R. 2, Simpsonville
Bell, C. M. (E)	Chester	Chester
Bell, J. L. (T)	Anderson	Anderson
Bethea, W. M. (A)	Marlboro	McColl
Bickley, B. L. (CE)	Bamberg	Ehrhardt
Bishop, W. A. (CE)	Spartanburg	R 3, Woodruff
Blackwell, J. D. (T)	Sumter	Mayesville
Blackwell, T. J. (A)	Williamsburg	Salter's Depot
Blakeney, C. R. (T)	Lancaster	R. 2, Lancaster
Boseman, J. C. (E)	Darlington	R. 4, Darlington
Bowie, C. H. (A)	Oconee	Seneca
Bradley, M. E. (CE)	Oconee	Clemson College
Breedlove, W. (CE)	Pickens	Six Mile
Britt, C. E. (CE)	McCormick	McCormick
Britt, J. O. (A)	Florence	R. 2, Timmons ville
Brogdon, W. J. (E)	Sumter	Sumter
Bryan, C. A. (A)	Allendale	R. 1, Allendale
Bryce, G. T. (Arch.)	Florence	643 W. Evans St.
Ruford, J. A. (T)	Laurens	R. 3, Clinton
Burgess, R. H. (A)	Anderson	R. 3, Belton
Burley, J. E. (E)	Oconee	Walhalla

Name and Course	County	Residence
Burley, W. J. (E)	Fairfield	Monticello
Burriss, L. J. (E)	Anderson	R. 1, Anderson
Campbell, M. M. (T)	Greenville	108 E. Washington, St.
Campbell, T. A. (T)	Anderson	Anderson, R. 6
Carroll, G. H. (A)	York	R. 1, York
Carter, H. M. (GS)	Colleton	Smoaks
Carter, S. T. (E)	Richland	909 King St., Columbia
Carter, W. H. (A)	Bamberg	Lodge
Carver, J. J. (E)	Spartanburg	Fairforest
Cato, J. B. (CE)	Chesterfield	Pageland
Chandler, L. D. (GS)	Sumter	Sumter
Chapman, H. T. (E)	Spartanburg	Inman
Clarke, J. H. (A)	Abbeville	Calhoun Falls
Clarke, W. H. (A)	Anderson	R. 4, Pendleton
Clinton, T. F. (A)	Chester	R. 1, Edgemoor
Cook, L. A. (A)	Laurens	R. 2, Fountain Inn
Cooley, T. F. (A)	Abbeville	Loundesville
Cooper, P. F. (E)	Bamberg	Denmark
Corley, S. R. (A)	Lexington	R. 6, Lexington
Covington, J. B. (E)	Marlboro	Bennettsville
Crook, M. D. (CE)	York	R. 1, Fort Mill
Cunningham, J. W. (Arch.)	Sumter	Sumter
Cuttino, B. H. (E)	Sumter	Sumter
Cuttino, D. S. (Arch.)		Newnan, Ga.
Cuttino, W. H. (E)	Greenville	R. 5, Greenville
Daniel, T. W. (E)	Spartanburg	275 S. Liberty St.
Dargan, W. C. (A)	Darlington	R. 3, Darlington
Davidson, L. S. (T)	Kershaw	Camden
Davis, B. W. (CE)	Greenville	411 Perry Ave.
Davis, R. R. (E)		Toccoa, Ga.
Dick, G. W. (E)	Sumter	Sumter
Dozier, J. P. (CE)	York	Rock Hill
Drake, H. B. (CE)	Anderson	Pelzer
Dunlap, S. B. (T)	York	R. 1, Smiths Turnout
Dunn, S. B. (Arch.)	Greenville	Taylors
Durst, W. P. (T)	Greenwood	Greenwood
Eadie, M. D. (T)		Brunswick, Ga.
Earley, E. B. (A)	Orangeburg	R. 2, Orangeburg
Ellis, E. S. (A)	Greenwood	Greenwood
Eskew, H. L. (E)	Greenville	Greenville
Evans, J. C. (T)	Chesterfield	Cheraw
Farmer, R. E. (CE)	Florence	Florence
Farrar, M. B. (T)	Spartanburg	170 Pine St.
Fennell, C. S. (CE)	Hampton	Hampton
Fennell, H. A. (CE)	Allendale	R. 1, Allendale
Ferguson, T. F. (A)	Abbeville	Abbeville
Fishburne, J. C. (A)	Collenton	Walterboro
Fogle, J. L. (A)	Bamberg	Denmark
Ford, J. G. (A)	Dillon	Lake View
Fowler, B. R. (A)	Greenville	R. 4, Greenville
Funderburk, O. F. (T)	Chester	Great Falls
Galloway, W. C. (E)	Greenville	407 Hampton Ave.
Gantt, J. H. (E)	Pickens	Pickens

Name and Course	County	Residence
Garrison, H. P. (A)	York	R. 4, Fort Mill
Garrison, J. C. (CE)	Pickens	Easley
Garvin, J. P. (A)		Atlanta, Ga.
Gault, H. S. (CE)	Spartanburg	Glendale
Geddings, E. N. (A)	Sumter	R. 2, Sumter
Gillespie, D. D. (CE)	Oconee	R. 4, Seneca
Ginn, R. J. (GS)	Anderson	125 Webb St.
Glaze, C. H. (CE)	Richland	1815 Pendleton St., Columbia
Godfrey, A. B. (A)	Cherokee	R. 9, Gaffney
Graves, G. S. (E)	Cherokee	307 S. Converse St.
Green, C. D. (T)	Spartanburg	566 S. Church St.
Guy, J. H. (Arch.)	Richland	Columbia
Hafers, E. P. (E)	Aiken	Aiken
Hair, J. C. (C)	Barnwell	Blackville
Hanner, T. G. (CE)	Florence	Florence
Hane, A. W. (A)	Calhoun	St. Matthews
Hane, H. T. (A)	Calhoun	R. 2, Fort Motte
Hardee, H. M. (E)	Florence	Florence
Harmon, T. (CE)	Spartanburg	183 S. Converse, St.
Harrell, J. C. (A)	Marion	Marion
Harrington, R. C. (T)	Williamsburg	R. 2, Greeleyville
Harris, H. P. (A)	Anderson	R. 1, Belton
Harrison, W. S. (T)	Spartanburg	R. 2, Moore
Hart, L. W. (A)	Orangeburg	R. 2, Vance
Harvey, B. C. (A)	Cherokee	Gaffney
Heard, L. M. (T)	Anderson	Belton
Heller, J. N. (E)	Anderson	Sandy Springs
Henderson, W. N. (T)	Greenwood	Verdery
Herring, W. H. (A)	Marion	Marion
Hewlett L. M. (A)	Allendale	Appleton
Hicks, J. O. (Arch.)		Lexington N. C.
Higgins, R. C. (E)	Georgetown	Georgetown
Hightower, R. E. (E)	Bamberg	Denmark
Hope, G. M. (C)	Bamberg	Denmark
Hudgens, W. W. (Arch.)	Anderson	Williamston
Hudson, G. E. (A)	Spartanburg	266 S. Converse
Hughston, T. L. (CE)	Spartanburg	R. 4, Spartanburg
Humphrey, C. J. (CE)	Florence	R. 6, Timmons ville
Hunter, H. M. (T)	Laurens	Clinton
Husbands, H. (T)	Florence	Florence
Hutchins, G. S. (E)	Spartanburg	135 Oakland Ave.
Hutchins, W. C. (E)	Spartanburg	135 Oakland Ave.
Jakson, L. S. (A)	Orangeburg	Orangeburg
James, W. C. (A)	Greenville	R. 5, Greer
Jameson, P. H. (A)	Anderson	R. 1, Liberty
Jefcoat, W. A. (E)		Bluefield W. Va.
Jeter, E. C. (A)	Fairfield	R. 1, Wallaceville
Johns, J. H. (CE)	Oconee	R. 1, Westminister
Johnson, H. E. (T)	Anderson	712 E. Whitner
Jones, A. S. (E)	Oconee	Walhalla
Jones, J. A. (E)	Florence	Florence
Jones, J. G. (A)	Spartanburg	Crescent
Jones, H. (CE)	Florence	Florence

Name and Course	County	Residence
Jones, M. A. (E)	Richland	1112 Price Ave., Columbia
Jones, S. E. (A)	Greenville	R. 4, Greer
Jordan, J. A. (A)	Chester	R. 3, Richburg
Jowers, H. C. (E)	Chesterfield	Angelus
Kay, C. W. (A)	Anderson	R. 4, Belton
Kelley, W. G. (E)	Anderson	Pelzer
Killingworth, H. M. (E)	Barnwell	Barnwell
King, J. L. (A)	Anderson	R. 1, Belton
Kirsch, W. A. (T)	Bamberg	Bamberg
Klugh, G. F.		Atlanta, Ga.
Knobloch, L. G. (GS)	Charleston	92 Bull St.
Koon, O. R. (A)	Richland	Peak
Langford, C. H. (A)	Richland	Blythewood
Latham, C. G. (A)	York	York
Lesesne, F. F. (A)	Williamsburg	R. 1, Greeleyville
Levin, J. D. (Arch.)	Beaufort	Beaufort
Lineberger, C. H. (CE)	Greenville	412 Hampton Ave.
Link, A. C. (T)	York	Fort Mill
Linton, W. T. (CE)	Pickens	Clemson College
Lipscomb, R. W. (A)	Cherokee	Gaffney
Lomas, C. H. (A)	Richland	R. 3, Columbia
Long, J. T. (E)	Anderson	812 Calhoun St.
Love, J. D. (E)	York	McConnellsville
McCalla, J. W. (E)		Heardmont, Ga.
McColl, H. G. (A)	Marlboro	McColl
McConnell, R. E. (A)	Anderson	Anderson
McCutchen, G. H. (A)	Lee	Pishopville
McDaniel, C. D. (T)	Beaufort	Beaufort
McDowell, H. E. (CE)	York	Rock Hill
McGill, T. J. (E)	Richland	Columbia
McGlone, T. F. (GS)	Spartanburg	298 E. Main St.
McGowan, J. F. (CE)	Florence	Florence
McGowan, R. W. (CE)	Florence	Florence
McMeekin, R. P. (CE)	Fairfield	Jenkinsville
McPhail, J. W. (A)	Anderson	Anderson
McPhail, S. (A)	Anderson	Townville
Macfie, W. H. (E)	Fairfield	Winnsboro
Major, S. M. (A)	Anderson	R. 2, Belton
Maner, W. F. (A)	Ailendale	Allendale
Manning, F. C. (CE)	Marlboro	Clio
Marchbanks, J. C. (A)	Anderson	Anderson
Martin, L. K. (A)	Greenwood	Ninety-six
Martin, W. E. (A)	Anderson	R. 1, Anderson
Martin, W. N. (E)	Greenville	581 W. Washington
Marvin, H. W. (E)	Colleton	White Hall
Mason, W. F. (A)	Oconee	R. 2, Westminster
Maxwell, J. A. (E)	Spartanburg	R. 4, Spartanburg
Meacham, T. B. (GS)	Greenwood	Greenwood
Mealing, J. P. (S)		R. 5, Augusta, Ga.
Mercer, C. W. (E)	Georgetown	Georgetown
Messervy, L. C. (A)	Charleston	Meggetts
Midkiff, R. B. (CE)		Alexandria, Va.
Miller, P. L. (CE)		Hickory, N. C.

Name and Course	County	Residence
Mims, J. Z. (E)	Spartanburg	120 Golding St.
Moore, B. R. (A)	Sumter	Wedgfield
Moore, J. N. (A)	Anderson	Belton
Moore, L. B. (E)	Spartanburg	111 N. Converse St.
Mundy, J. T. (E)	Richland	1811 Bull St., Columbia
Murrah, E. S. (E)	Union	Union
Norton, E. L. (A)		Gibson, N. C.
Norton, W. L. (A)	Oconee	Walhalla
O'Dell, W. R. (A)	Pickens	R. 3, Liberty
Oliver, E. F. (A)	Williamsburg	Greelyville
Owens, S. G. (E)	Greenwood	Greenwood
Padgett, L. C. (E)	Colleton	Green Pond
Parker, G. F. (E)	Florence	Ebenezer
Partridge, J. F. (E)	Pickens	Pickens
Patrick, C. H. (A)	Hampton	Varnville
Perry, C. F. (E)	Greenville	309 Mills Ave
Philpot, C. P. (E)	Laurens	Laurens
Pickens, R. O. (T)	Spartanburg	258 S. Church St.
Plyler, D. P. (Arch.)	Lancaster	R. 6, Lancaster
Pressley, W. H. (A)	Greenwood	Verdery
Pruitt, W. R. (E)	Anderson	546 N. Fant St.
Pursley, L. H. (A)	York	R. 1, York
Purvis, E. R. (A)	Florence	Florence
Ramsey, W. T. (Arch.)	Oconee	R. 1, Madison
Rees, H. F. (E)		St. Petersburg, Fla.
Reeves, T. M. (A)	Colleton	Cottageville
Reinach, M. M. (T)	Greenville	22 W. Earle
Reynolds, P. H. (E)	Lee	Bishopville
Rhodes, W. A. (CE)	Darlington	R. 1, Darlington
Richey, B. R. (A)	Greenwood	Ware Shoals
Ridgeway, E. J. (A)	Clarendon	Jordan
Robinson, J. H. (CE)	Greenville	909 E. North St.
Ross, T. M. (Arch.)	Spartanburg	101 St. Andrews St.
Ross, W. M. (E)	Clarendon	R. 2, Summerton
Rutledge, J. R. (E)	Greenville	26 Westfield
Rykard, R. H. (E)	Greenwood	140 Pressley St.
Sadler, J. K. (E)	Greenville	304 Perry Ave.
Sanders, H. I. (E)	Greenwood	Ninety-Six
Seaborn, W. M. (CE)	Oconee	Walhalla
Shelley, L. W. (A)	Marion	R. 4, Marion
Sheppard, B. (GS)	Orangeburg	R. 3 Orangeburg
Sholar, J. O. (E)	Sumter	Sumter
Shull, W. G. (CE)	Greenville	124 W. Stone Ave.
Sims, E. F. (C)	Pickens	Central
Smith, M. G. (E)		Atlanta, Ga.
Smith, R. L. (E)	Anderson	Starr
Smith, S. L. (E)	Aiken	Graniteville
Smith, T. L. (A)	Marion	Marion
Smith, T. W. (A)	Saluda	Saluda
Sparks, R. H. (CE)	Cherokee	Gaffney
Springer, E. F. W. (E)		Schenectady, N. Y.
Stallings, W. K. (Arch.)	Spartanburg	232 S. Church St.
Steadman, C. L. (A)	Spartanburg	R. 3, Inman

Name and Course	County	Residence
Stewart, T. C. (A)	Greenville	Simpsonville
Stewman, L. (E)	Lancaster	Lancaster
Stokes, T. L. (A)	Florence	R. 5, Timmons ville
Stoppelbein, H. L. (E)	Charleston	Charleston
Stribling, R. M. (T)		Waynesboro, Ga.
Stuckey, D. C. (A)	Lee	R. 3, Bishopville
Stutts, R. T. (T)	Union	Union
Talbert S. C. (CE)	McCormick	McCormick
Tate, T. B. (A)	Pickens	Norris
Taylor, H. K. (A)	Laurens	Laurens
Taylor, H. L. (A)	Greenville	R. 4, Greer
Taylor, J. M. (T)	York	Rock Hill
Thomason, G. L. (A)	Laurens	R. 4, Gray Court
Thompson Z. V. (E)		Hendersonville, N. C.
Timmerman W. P. (A)	Lexington	Batesburg
Tolbert, J. N. (T)	Greenwood	Greenwood
Truesdale, E. V. (A)	Kershaw	Kershaw
Turner, C. M. (A)	Barnwell	R. 2, Ellenton
Turner, J. A. (C)	Bamberg	Denmark
Turner, W. B. (A)	Barnwell	Ellenton
Tyler, E. L. (E)		Broxton, Ga.
Vandiver, E. H. (E)	Pickens	Calhoun
Vaughn, F. E. (A)	Laurens	R. 4, Fountain Inn
Wallace, J. C. (GS)	Anderson	R. 1, Pendleton
Wallace, R. W. (A)	Laurens	R. 1, Gray Court
Waller, P. F. W. (E)	Charleston	Myers
Walsh, A. A. (E)	Greenville	17, Folly St.
Warr, E. L. (E)	Union	Jonesville
Watson, E. C. (E)	Allendale	Allendale
Watson, S. P. (A)	Spartanburg	R. 2, Enoree
Watson, W. T. (E)	Laurens	Laurens
Webb, J. A. (E)	Anderson	R. 5, Anderson
Whaley, E. W. (E)		Knoxville, Tenn.
Whetstone, G. B. (E)	Orangeburg	R. 1, North
Whilden, J. E. (E)	Sumter	Sumter
White H. A. (A)	Marion	Centenary
White, L. B. (CE)	Florence	Timmons ville
White, L. M. (CE)	York	1 Rock Hill
White, R. B. (E)	Darlington	Hartsville
Wiggins, L. E. (CE)	Bamberg	Bamberg
Williams, G. P. (A)	Marion	Mullins
Williams, H. T. (T)	York	R. 1, Bowling Green
Williams, J. S. (E)	Aiken	North Augusta
Williams, M. L. (E)	Lexington	Swansea
Wilson, G. V. (A)	Orangeburg	R. 1, Bowman
Wingard, B. F. (A)	Lexington	Lexington
Witherspoon, J. H. (T)	Lee	R. 1, Mayesville
Witt, L. H. (E)	Lexington	Swansea
Woodward, M. H. (CE)	Barnwell	Barnwell
Wright, J. S. (CE)	Greenville	Duncan
Wylie, A. P. (E)	York	Rock Hill
Young, D. T. (E)		Anniston, Ala.

FRESHMAN CLASS

County and city are the same if street only is given.

Name and Course	County	Residence
Acker, W. H. (E)	Mount Vernon, N. Y.	
Adams, Hubert (E)	Oconee	Seneca
Adams, James L. (E)	York	R. 4, Rock Hill
Adams, Joe L. (E)	McCormick	Meriwether
Alexander, C. R. (A)	Pickens	R. 1, Calhoun
Allen, H. A. (E)	Spartanburg	Trough
Anderson, C. E. (E)	Florence	605 Byrd St. Timmons ville
Anderson, Laird (E)		Auburndale, Fla
Anderson, T. C. (E)	Greenwood	Ninety Six
Andrews, G. T. (E)	Laurens	R. 3, Fountain Inn
Armstrong, Meade (E)	Greenville	Fountain Inn
Arnett, J. B. (E)	Dillon	R. 1, Lake View
Asbill, L. M. (A)	Saluda	Ridge Spring
Austin, W. R. (E)	Greenville	Simpsonville
Ayers, R. G. (A)		Tabor, N. C.
Bagnal, H. F. (E)	Clarendon	Manning
Barber, H. S. (E)	Spartanburg	Clifton
Barry, W. F. (E)	Spartanburg	R. 1, Moore
Barton, C. R. (E)	Anderson	20 Lyon St. Anderson
Barton, W. S. (E)	Orangeburg	R. F. D. Orangeburg
Barwick, D. H. (E)	Sumter	Pinewood
Batson, D. L. (E)	Greenville	1425 Augusta Road, Greenville
Beam, H. F. (A)	Greenville	Pelzer
Bennett, W. T. (E)	Bamberg	Olar
Benton, L. C. (A)	Florence	R. 6, Timmons ville
Berry, H. B. (A)	Orangeburg	Branchville
Blackman, J. M. (E)	Anderson	R. 2, Pendleton
Blankenship, J. M. (E)	York	118 Caldwell St. Rock Hill
Blicht, E. W. (E)	Charleston	Ror 132, North Charleston
Bodie, D. S. (A)	Saluda	R. 2, Batesburg
Boggs, N. L. R. (A)	Pickens	Calhoun
Boleman, Roy (E)	Anderson	Townville
Boykin, G. L. (E)	Sumter	Mayesville
Brant, J. B. (E)	Allendale	Ulmer
Bruce, J. W. (E)	Anderson	1103 S. Main St., Anderson
Buffkin, M. R. (A)	Horry	R. F. D. Green Sea
Burdett, C. M. (A)	Greenville	Simpsonville
Burris, J. L. (E)	Anderson	R 8, Anderson
Byrd, H. S. (A)	Darlington	Home Ave. Box 29, Hartsville
Byrd, J. L. (A)	Darlington	R. F. D. Society Hill
Cain, C. J. (A)	Florence	Pamplico
Cain, S. D. (A)	Sumter	R. 2, Sumter
Calhoun, R. G. (E)		Kingsport, Tenn.
Callahan, J. F. (E)	Greenville	410 St. John St., Greenville
Camp, W. J. (A)	Cherokee	R. 7, Gaffney
Carter, J. H. (E)	Chester	R. 1, Lowry
Carter, Ralph (A)	Oconee	Walhalla
Carter, Richard C. (E)	Orangeburg	Cope
Caughman, James M. (E)	Richland	1409 Gervais St. Columbia

Name and Course	County	Residence
Caughman, John M. (E)	Lexington	Lexington
Causey, H. C. (E)	Horry	R. 2, Tabor, N. C.
Chapman, T. L. (A)	Greenville	R. 4, Pelzer
Cheek, Victor L. (E)	Cherokee	Blacksburg
Chewning, Fred (A)	Clarendon	Manning
Chitty, M. G. (E)	Orangeburg	Norway
Clary, F. E. (E)	Cherokee	R. 3, Gaffney
Clyburn, T. M. (A)	Lancaster	R. 2, Lancaster
Clyburn, W. P. (C)	Lancaster	Lancaster
G. P. Cobb (E)	Pickens	Easley
Cochran, J. H. (A)	Greenwood	R. 1, Donalds
Coleman, W. L. (E)	Greenville	Colonial Ave. Greenville
Cook, C. R. (A)	York	Fort Mill
Copeland, T. H. (A)	Laurens	65 E. Carolina Ave. Clinton
Corley, C. E. (E)	Lexington	R. 3, Lexington
Cornwall, B. V. (C)		Alto, Ga.
Courtney, J. H. (E)	Aiken	R. 2, Aiken
Cox, E. R. (A)	Anderson	Brown Ave. Belton
Craven, W. B. (A)	Marion	Gresham
Crosland, R. E. (A)	Marlboro	R. 5, Bennettsville
Culp, Desford (C)	Lancaster	R. 4, Lancaster
Cunningham, H. W. (E)	Lee	9 Ridge St. Bishopville
Cussac, H. W. (A)	Florence	R. 3, Timmons ville
Daniel, G. T. (A)	Williamsburg	R. 1, Cooper
Daniel, M. R. (E)	Bamberg	Box 515, Bamberg
Davis, G. N. (E)	Marion	R. 1, Centenary
Davis, H. L. (A)	Spartanburg	183 Alabama St. Spartanburg
Davis, J. N. (A)	Laurens	R. 1, Ware Shoals
Davis, St. Clair (E)	Marion	Centenary
Davis, T. C. (G. S.)	Greenville	5 Fifth Avenue Greenville
DeLoach, R. C. (A)	Hampton	Furman
Dickinson, G. M. (C)	Bamberg	125 Second St. Bamberg
Dickson, R. W. (A)	Clarendon	Manning
Dill, T. E. (E)	Greenville	6 Dorsey Ave. Greenville
DuBose, W. P. (E)	Darlington	119 Spring St. Darlington
Duffie, H. F. (A)	Saluda	Saluda
Dunlap, O. P. (A)	Anderson	Honea Path
DuPre, A. J. (E)	Richland	1820 Pendleton, Columbia
Eaddy, J. M. (A)	Florence	R. 1, Leo
Earle, T. B. (E)	Oconee	Walhalla
Edwards, B. L. (E)	Laurens	R. 2, Fountain Inn
Eison, F. J. (E)	Union	Jonesville
Elis, J. T. (A)	Spartanburg	R. 1, Woodruff
Epting, E. L. (E)	Newberry	R. 1, Peak
Ervin, E. D. (E)	Darlington	R. 3, Darlington
Evans, D. D. (A)	Florence	R. 1, Pamplico
Evans, J. E. (E)		Charlotte, N. C.
Faulkenberry, G. E. (E)	York	Rock Hill
Fike, Claudius (E)	Spartanburg	637 S. Church Spartanburg
Finch, M. C. (A)	Spartanburg	R. 1, Pauline
Flowers Bert, (A)	Darlington	R. 1, Dovesville
Ford, P. T. (E)	Dillon	Lake View
Foster, J. R. (A)	Spartanburg	R. 3, Woodruff

Name and Course	County	Residence
Fraser, B. P. (E)	Georgetown	12 Cannon St., Georgetown
Fripp, A. L. (A)	Anderson	Pendleton
Gable, J. V. (A)	Abbeville	Antreville
Gaines, F. P. (E)	Oconee	Westminster
Gaines, J. P. (A)	Pickens	Central
Galloway, J. C. (E)	Lee	Lynchburg
Gandy Voit (A)	Darlington	R. 9, Society Hill
Gibson, J. R. (E)	Greenville	58 Rutherford St. Greenville
Gibson, Paul (A)	Chester	R. 3, Blackstock
Gilmer J. C. (E)	Anderson	214 Monroe St. Anderson
Glenn, W. I. (E)	Greenwood	249 Pressley St. Greenwood
Graham, G. M. (A)	Williamsburg	Cades
Graham, J. M. (A)	Greenwood	Ware Shoals
Graham, L. H. (E)	Anderson	1705 S. Main St. Anderson
Gray, J. W. (E)	Darlington	126 Sanders St. Darlington
Gray, U. S. (A)	Orangeburg	R. 2, Cope
Griffin, E. L. (C)	Anderson	304 Holmes St. Belton
Griffin, F. M. (E)	Anderson	Anderson
Griffin, W. B. (G. S.)	Pickens	Catechee
Grumbles, W. F. (E)	Laurens	R. 1, Owings
Guy, J. W. (E)	Chester	R. 4, Chester
Hall, R. M. (E)	Anderson	Pendleton
Hammett, R. D. (E)	Sumter	S. Washington St. Sumter
Harling, J. N. (A)	Richland	Box 621, Columbia
Harper, J. L. (E)	Spartanburg	Oak Ave. Spartanburg
Harter, J. W. (E)	Allendale	Fairfax
Harvin, S. A. (A)	Sumter	R. 2, Sumter
Hawkins, J. F. (A)	Florence	Lake City
Henderson, L. N. (A)	Fairfield	Blairs
Hendricks, A. P. (A)	Pickens	R 1 Pickens
Hendrix, J. P. (A)	Spartanburg	R. 1, Duncan
Higgins, E. E. (E)	Pickens	Easley
Hitt, G. L. (E)	Anderson	Belton
Hoefer, H. W. (E)	Richland	1624 Pendleton St., Columbia
Hoke, F. M. (E)	Cherokee	Blacksburg
Holland, W. G. (E)	Colleton	Pattillo
Hoover, J. H. (E)	Hampton	Hampton
Howle, R. M. (A)	Darlington	R. 1, Hartsville
Jackson, C. A. (E)	Sumter	Horatio
Jeffers, R. (A)	Orangeburg	Holly Hill
Jenkins, J. M.		Crowley, La.
Johns, K. M. (E)	Oconee	Westminster
Johnson, E. V. (E)	Spartanburg	Arcadia
Jones, H. W. (A)	Aiken	R. 1, Earle
Jones, L. E. (E)	Pickens	R. 1, Dacusville
Jones, R. L. (E)	Kershaw	R. 2., Bethune
Jordan, E. P. (E)	Spartanburg	Spartanburg
Kaufman, C. A. (E)	Lexington	Lexington
Kay, W. H. (E)	Anderson	Honea Path
King, C. J. (E)	Sumter	Sumter
King, E. R. (E)	Cherokee	Gaffney
King, G. N. (E)	Oconee	R. 5, Townville
King, L. S. (A)	Darlington	R. 1, Hartsville

Name and Course	County	Residence
Kinsler, J. F. (E)	Pickens	Central
Kirkland, R. C. (E)	Bamberg	Ehrhardt
Kirkley, F. E. (E)	Kershaw	R. 4, Kershaw
Kirton, J. D. (E)	Williamsburg	Cades
Kline, W. N. (E)		Savannah, Ga.
Knopf, B. A. (C)	Allendale	R. 1, Fairfax
Lachicotte, Francis (E)		Charlotte, N. C.
Lance, C. C. (A)	Pickens	R. 1, Dacusville
Langston, W. A. (A)	Florence	R. 3, Timmons ville
Lawson, R. A. (E)	Charleston	10 Vanderhost St. Charleston
Leach, E. T. (A)	Florence	Hyman
Leland, E. C. (E)		Saluda, N. C.
Lesemann, W. F. (E)	Charleston	4 Orange St., Charleston
Levett, P. B. (E)	Richland	Columbia
Lewis, C. S. (E)		Crowley, La.
Littlejohn, H. A. (E)	Anderson	R. 1, Belton
Littlejohn, J. E. (A)	Union	Jonesville
London, H. R. (GS)	Cherokee	Blacksburg
Lupo, W. O. (A)	Dillon	Lake View
McAbee, T. R. (E)	Spartanburg	Inman
McCarley, T. H. (E)	Anderson	R. 8, Anderson
McCauley, H. R. (E)	Greenville	206 Rutherford St., Greenville
McCauley, J. H. (E)	Greenville	206 Rutherford St., Greenville
McClain, R. N. (A)	Spartanburg	Campobello
McClendon G. B. (A)	Barnwell	R. 2, Elko
McComb, J. R. (A)	Abbeville	Abbeville
McDonald, E. M. (E)	Charleston	101 Tradd St., Charleston
McGee, H. A. (E)	Colleton	Walterboro
McGee, R. L. (A)	Anderson	Belton
McLeod, V. C. (E)	Lee	R. 5, Camden
McLeskey, J. J. (E)	Oconee	Westminster
McMillan, R. F. (A)	Abbeville	Abbeville
McNeace, J. C. (E)	Anderson	443 E. River St., Anderson
Maddox, W. B. (E)	Anderson	142 Welch Ave., Anderson
Mahaffey, C. R. (E)	Anderson	Townville
Marshall, L. E. (E)	Richland	1409 Gervais St., Columbia
Martin, C. R. (E)	Greenville	32 Rowley St., Greenville
Martin, E. B. (E)	Cherokee	Gaffney
Martin, Joe (E)	Oconee	Westminster
Martin, J. A. (A)	Greenville	R. 3, Simpsonville
Massabeau, C. C. (E)	Spartanburg	R. 3, Woodruff
Mattison, J. A. (C)	Anderson	Belton
Mayer, Harold (A)	Greenwood	R. 1, Greenwood
May, C. J. (A)	Richland	811 5th St., Columbia
Mays, W. E. (E)	Pickens	Easley
Meares, G. A. (A)	Anderson	R. 3, Pelzer
Mikell, G. L. (E)	Charleston	Edisto Island
Miller, H. S. (E)	Oconee	Westminster
Miller, R. O. (A)	Union	R. 1, Jonesville
Miller, T. C. (A)	York	R. 6, York
Millford T. S. (A)	Edgefield	Johnston
Mitchell, R. D. (E)	Anderson	Belton
Mitchell, W. E. (E)	Greenville	Greenville

Name and Course	County	Residence
Moore, A. R. (A)	Sumter	Wedgefield
Moore, F. H. (G. S.)	York	324 Marion St., Rock Hill
Moore, P. P. (G. S.)	Oconee	R. 1, Madison
Morgan, B. W. (A)	Spartanburg	R. 1, Wellford
Morton, E. H. (E)	Greenville	19 Academy St., Greenville
Motes J. H. (A)	Laurens	Mountville
Moxon, J. G. (A)	Hampton	Varnville
Muller, J. D. (A)	Charleston	110 Tradd St. Charleston
Murdock, E. C. (A)	Abbeville	Antreville
Nalley, R. F. (A)	Pickens	R. 5, Easley
O'Dell, J. B. (A)	Pickens	Liberty
O.Dell, O. A. (A)	Pickens	R. 3, Liberty
ODell, S. W. (A)	Pickens	R. 3, Liberty
O'Quinn, J. D. (A)	Colleton	Williams
Owens, W. B. (C)	Laurens	Clinton
Parker, J. R. (A)	Anderson	R. 4, Iva
Patterson, H. F. (E)	Anderson	Williamston
Pearman, F. E. (A)	Anderson	R. 6, Anderson
Pearman, Dean (A)	Anderson	R. 6, Anderson
Pepper, B. B. (A)	Pickens	R. 5, Easley
Percival, J. H. (E)	York	R. 5 Rock Hill
Pinckney, C. H. (E)	Charleston	65 A. Rutledge Ave., Charleston
Pitts, I. S. (E)	Oconee	Westminster
Poe, H. D. (E)	Chesterfield	512 Church St., Cheraw
Poole, O. L. (GS)	Spartanburg	126 N. Dean St.
Poore, M. L. (E)	Anderson	Belton
Poppe, E. M. (E)		Tryon, N. C.
Porter, B. H. (E)	Georgetown	R. 1, Georgetown
Powers G. F. (A)	Marion	R. 1, Marion
Pressley, O. K. (A)	Chester	R. 4, Chester
Price, J. H. (A)	Marion	R. 1, Nichols
Price, J. M. (E)	Orangeburg	Norway
Pridmore, R. G. (A)	Cherokee	R. 9, Gaffney
Quattlebaum, W. M. (C)	Fairfield	Winnsboro
Ramsay, A. K. (A)	Pickens	R. 1, Calhoun
Ramsay, R. S. (E)	Hampton	Garnett
Ray, C. E. (A)	Barnwell	Blackville
Ready, P. H. (A)	Lexington	R. 1, Samaria
Reaves, James (E)	Clarendon	R. 6, Alcolu
Redfern, W. H. (E)		Charlotte, N. C.
Richardson, E. H. (A)	Clarendon	R. 2, Summerton
Riley, W. J. (A)	Hampton	R. 1, Garnett
Rivers, J. L. (G. S.)	Hampton	Brunson
Robertson, J. W. (A)	Sumter	R. 1, Rembert
Robinett, G. D. (E)	Georgetown	214 Dozier St., Georgetown
Rodgers, S. H. (E)	Colleton	Walterboro
Rogers, J. I. (A)	Marlboro	R. 2, Bennettsville
Rogers, W. M. (E)	Marlboro	Blenheim
Rose, W. T. (E)	Clarendon	Sardinia
Roth, Louis (E)	York	York
Sander, L. F. (E)	Charleston	95 Line St. Charleston
Scott, B. A. (A)	Greenville	R. 1, Princeton
Scott W. H. (A)	Greenville	R. 1, Princeton

Name and Course	County	Residence
Sexton, E. W. (A)	Anderson	R. 1, Starr
Shands, H. L. (A)	Florence	Ebenezer
Sharp, H. D. (E)	York	Leslie
Shedd, J. G. (E)	Fairfield	Winnsboro
Sherman, D. B. (T)	Pickens	Clemson College
Sherrill, D. H. (F)	Marlboro	R. 5, Bennettsville
Simpson, J. F. (A)	Richland	2904 Kershaw St., Columbia
Simpson, W. G. (E)	Anderson	Pendleton
Sloan, B. F. (G. S.)	Oconee	Walhalla
Sloan, J. D. (E)	Anderson	Pendleton
Smith, H. A. (A)	Lexington	R. 5, Lexington
Smith, R. L. (A)	York	York
Smith, S. T.	Pickens	Easley
Smoak, H. H. (A)	Charleston	R. F. D. Box 19, Meggett
Smoak, K. A. (E)	Bamberg	Bamberg
Snowden, H. C. (A)	Williamsburg	R. 1, Hemingway
Stacy, S. V. (A)	Cherokee	R. 3, Gaffney
Steele, W. H. (E)	Florence	Pamplico
Stevenson, M. B. (A)	Marion	R. 4, Marion
Stevenson, R. C. (E)	Fairfield	R. 3, Winnsboro
Stevenson, W. B. (A)	Chester	R. 1, Richburg
Stone, G. M. (A)	McCormick	Willington
Strange, H. G. (E)	Fairfield	Winnsboro
Stroman, C. W. (A)	Orangeburg	R. 1, Cameron
Stroman, J. D. (A)	Orangeburg	R. 2, Oranegburg
Suber, J. C. (E)	Greenwood	509 Taggart St., Greenwood
Sutton, E. H. (C)	Cherokee	200 Phifer St., Gaffney
Sweeney, R. L. (E)	Anderson	131 Roberts St., Anderson
Talley, J. H. (E)	York	346 Chestnut St., Rock Hill
Tatum, J. C. (E)	Marlboro	McColl
Tatum, R. J. (A)	Marlboro	Tatum
Taylor, R. A. (A)	Greenville	Fountain Inn
Taylor, W. I. (A)	Hampton	Varnville
Thomas, L. O. (A)	Williamsburg	Cades
Thurmond, A. G. (A)	Edgefield	Edgefield
Tice, F. F. (E)	York	114 Oakland Ave., Rock Hill
Tiencken, W. P. (E)	Charleston	67 Vandarhorst St., Charleston
Townsend, T. P. (E)	Marlboro	Bennettsville
Truluck, C. M. (E)	Florence	Motbridge
Truluck, R. N. (E)	Lee	Lynchburg
Turner, Hamish. (E)	Spartanburg	Landrum
Tuten, H. M. (A)	Colleton	Jacksonboro
Tuten, W. L. (A)	Jasper	Early Branch
Valley, J. B. (E)	Orangeburg	Elloree
Vaughn, S. M. (E)	Anderson	Belton
Venning, H. A. (A)	Clarendon	Manning
Vincent, W. D. (E)	Orangeburg	4 Oakland Place, Orangeburg
Vogel, L. J. (E)		Washington, D. C.
Wackyn, M. A. (E)	Richland	1607 Gadsden St., Columbia
Wall, J. E. (A)	Anderson	230 White Street, Anderson
Warner, H. D. (E)	Lexington	R. 2, Lexington
Webb, E. VonH. (G. S.)	Anderson	1021 W. Market, Anderson
Webb, T. W. (A)	Aiken	Aiken

Name and Course	County	Residence
Weil, J. H. (E)	Charleston	7 Rutledge Ave., Charleston
Welch, E. V. (A)	Orangeburg	R. 3, Holly Hill
Welch, W. D. (A)	Richland	2402 Divine St., Columbia
West, W. P. (E)	Charleston	Fort Moultrie
Whitten, S. E. (E)	Anderson	Pedleton
Whittle, C. C. (A)	Aiken	Williston
Wilder, A. B. (E)	Sumter	Mavesville
Williams, A. (E)	Anderson	438 E. River St., Anderson
Williams, H. L. (A)	Hampton	R. F. D. Bruson
Williams, J. F. (E)	Sumter	Sumter
Williams T. L. (E)	York	630 College Ave., Rock Hill
Williamson, W. F. (E)	Richland	1619 Sumter St., Columbia
Wilson, C. D. (A)	Richland	Blythewood
Wilson, V. L. (G. S.)	Allendale	Fairfax
Wingo, D. L. (E)	Greenville	10 Lawton Ave., Greenville
Wood, J. K. (E)	Greenwood	615 E. Cambridge St., Greenwood
Woodham, J. B. (E)	Lee	Bishopville
Workman, C. R. (A)	Laurens	Goldville
Wray W. J. (E)	York	York
Wright, C. D. (E)	York	Park Ave., Rock Hill
Yarborough, R. W. (E)	Spartanburg	747 Howard St., Spartanburg
Yongue, E. A. (A)	Chester	Blackstock
Young, E. G. (E)	York	360 Confederate Ave. Rock Hill
Allison, H. M. (2)	Greenville	Greenville
Berry, L. E. (2)	Spartanburg	R. 1, Moore
Chapman H. A. (1)	Anderson	R. 4, Belton
Cross, J. B. (2)	Oconee	Westminster
Edwards, G. B. (1)	Darlington	Darlington
Haynie, D. P. (1)	Anderson	Belton
Heller, H. (1)	Oconee	Seneca
Hodge, J. H. (2)	Florence	R. 6, Timmonsville
Holman, F. W. (2)	Florence	Florence
James, F. G. (2)	Greenville	Greer
Little W. W. (1)	Newberry	Whitmire
Martin, S. P. (2)	Anderson	R. 1, Pendleton
Norris, J. G. (2)	Greenville	Piedmont
Ragin, J. J. (2)	York	R. 4, Rock Hill
Schaefer, W. B. (2)		Toccoa, Ga.
Solomons, J. F. (1)	Hampton	Estill
Stelling, R. N. (2)	Aiken	N. Augusta
Styles, H. (1)	Greenville	Travelers Rest
Tinkler J. (1)	Greenwood	R. 3 Ninety-Six
Watkins, A. W. (2)	Newberry	Chappells
Welborn, M. B. (2)	Anderson	R. 2, Pendleton

TWO-YEAR TEXTILE COURSE

Name and Course	County	Residence
Brannon, R. R. (1)		Ashbon, Ga.
Callison, F. (1)	Greenwood	R. 1, Callison
Campbell, D. F. (1)		Anniston, Ala.
Coker, W. T. (1)	Florence	R. 5, Timmons ville
Edmonds, W. W. (1)	Anderson	Anderson
Etters C. W. (2)	Chester	Chester
Etters, F. E. (2)	Chester	Chester
Griffis, H. J. (2)		Tallassee, Ala.
Hanna, M. L. (1)	Laurens	R. 1, Laurens
Imes, G. C. (1)		Griffin, Ga.
Moore, J. L. (2)		Lagrange, Ga.
Robinson, H. B. (2)		Lagrange, Ga.
Simmons, G. G. (2)	Greenville	Greenville
Sumner, J. D. (1)	Darlington	R. 2, Darlington
Tuttle, R. H. (2)		Lenoir, N. C.
Warren, E. (1)		Alexander City, Ala.
Westmoreland, J. W. (2)	Greenwood	Greenwood
Williams, J. C. (1)	Greenwood	Ninety-six

TWO-YEAR AGRICULTURAL COURSE

Burdett, J. M. (2)	Greenville	R. 4, Pelzer
Cain, D. M. (1)	Sumter	R. 2, Sumter
Chamblee, A. D. (2)	Anderson	R. 4, Anderson
Douglass, C. V. (2)	Richland	R. 1, Columbia
Drake T. F. (1)	Anderson	R. 7, Anderson
Felder, R. P. (1)	Clarendon	R. 2, Summerton
Gibson, E. W. (2)	Chester	R. 1, Richburg
Griffin, R. C. (1)	Anderson	Anderson
Herndon, R. L. (1)	Marlboro	R. 1, Bennettsville
Hicks, J. R. (2)	Darlington	Hartsville
Huggins, L. H. (1)	Kershaw	R. 5, Camden
Kershaw, J. G. (1)	Lexington	R. 3, Gilbert
Knight, W. E. (2)	Chesterfield	R. 3, Pageland
Leitner, J. A. (2)	Richland	R. 1, Irmo
Mattison, M. G. (1)	Anderson	R. 4, Belton
Miller, E. E. (2)	Chesterfield	Jefferson
Moore, R. J. (2)	Greenville	R. 3, Simpsonville
Moorer, R. Q. (1)	Orangeburg	Parler
Patterson, L. H. (2)	York	R. 7, Rock Hill
Player, J. W. (1)	Lee	Elliott
Player, W. W. (1)	Lee	Elliott
Porcher, P. G. (2)	Charleston	Mt. Pleasant
Tatum, B. M. (2)	Marlboro	McColl
Tuten, W. A. (2)	Colleton	Jacksonboro
Wilson, J. C. (1)	Anderson	R. 8, Anderson

IRREGULAR COURSES

(Collegiate Work)

Name and Course	County	Residence
Wright, P. G. (1)	Marlboro	Clio
Aull, G. H.* (Agr. Ch.))	Oconee	Clemson College
Coleman, A. A. (T)	Florence	Hyman
Hart, T. J.* (Hort)	Oconee	Clemson College
Klugh, W. W. (Hort)	Pickens	Clemson College
Knotts, F. L. (E)	Orangeburg	R. 1, North
Martin, W. J. B. (Agric)	Greenville	R. 1, Simpsonville
Napier, C. D. (A)	Marlboro	Blenheim
Nichols, P. M. (E)	Newberry	Silver Street
Parker, W. E. (E)	Charleston	38 King St.
Pruitt, A. (E)	Anderson	320 W. Franklin
Richards, L. K. (CE)	Oconee	Clemson College
Rhodes, F. R. (CE)	Darlington	Darlington
Seigler, B. M. (Arch.)	Oconee	Clemson College
Sitton, B. G. *(Ch & Gerj	Anderson	Pendleton
Verdery, A. B. (GS)		Augusta Ga.
Watson, L. P. (Agric)	Saluda	Ridge Springs
Wise, C. T. (CE)		R. 5, Augusta, Ga.
*B. S. Clemson College		

ENROLLMENT SUMMARIES

Regular Session 1925- 1926

By Counties in South Carolina

Abbeville	8	Hampton	15
Allendale	12	Horry	7
Aiken	15	Jasper	2
Anderson	126	Kershaw	6
Bamberg	21	Lancaster	12
Barnwell	10	Laurens	24
Beaufort	7	Lee	14
Calhoun	7	Lexington	22
Charleston	20	Marion	15
Cherokee	20	Marlboro	24
Chester	19	McCormick	6
Chesterfield	9	Newberry	9
Clarendon	10	Oconee	43
Colleton	16	Orangeburg	37
Darlington	24	Pickens	42
Dillon	6	Richland	31
Dorchester	2	Saluda	10
Edgefield	5	Spartanburg	62
Fairfield	5	Sumter	29
Florence	42	Union	12
Georgetown	7	Williamsburg	9
Greenville	71	York	42
Greenwood	27		
Total for South Carolina			970

By States and Foreign Countries

Alabama	5	North Carolina	15
China	1	Tennessee	3
Florida	2	Virginia	1
Georgia	27	West Virginia	1
Louisiana	2	District of Columbia	1
New York	3	South Carolina	970
New Jersey	1		

1032

SUMMARY OF THE SUMMER SESSION, 1925

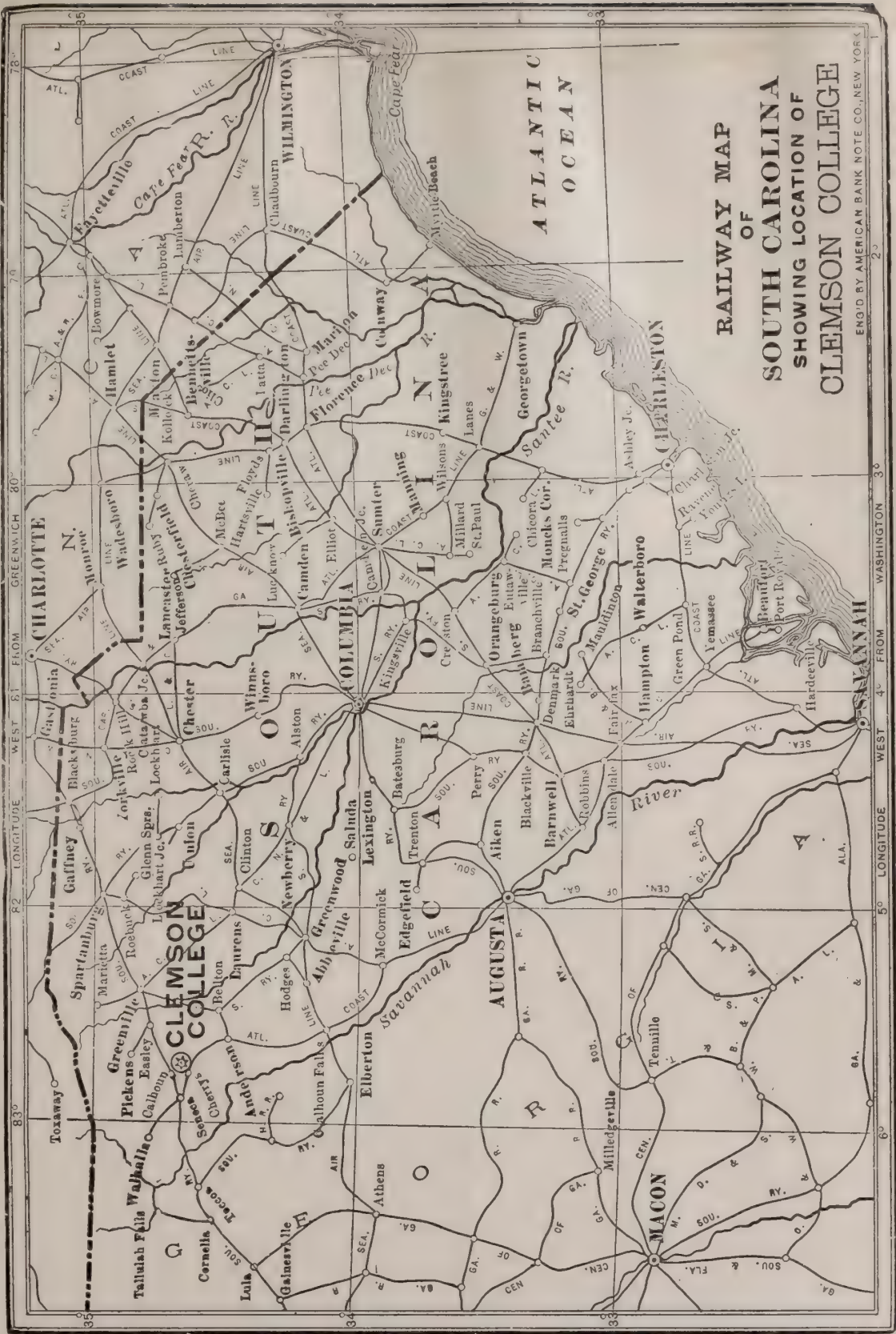
Teachers' Courses	33
College Make Up Course	16
Cotton Grading	6
Total	55

Summary by Classes and Courses for the Regular Session

CLASS	Agriculture	Engineering Unclassified	Electrical Engineering	Mechanical Engineering	Civil Engineering	Textile Engineering	Chemistry	Industrial Engineering	Architecture	General Science	Pre-Medical	TOTALS
Senior	45	.....	29	15	8	8	6	15	4	1	.....	131
Junior	67	52	.....	.....	26	6	1	11	9	9	.....	181
Sophomore	100	92	.....	.....	48	32	4	.....	15	9	13	313
Freshman	135	184	.....	.....	.....	.....	9	.....	.....	10	8	346
Special-Irregular	6	.....	4	.....	3	1	1	.....	1	1	.....	17
Two Year Agric.	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
Two Year Textile	.....	.....	.....	.....	.....	18	.....	.....	.....	.....	.....	18
TOTALS	379	328	33	15	85	65	21	26	29	30	21	1032

General Summary of Enrollment for 1925-1926

Regular College Session	1032
Summer Session	55
Total Enrollment	1087
Less individuals enrolled in both Regular and Summer Sessions.....	16
Total individuals in attendance	1071



RAILWAY MAP
OF
SOUTH CAROLINA
SHOWING LOCATION OF
CLEMSON COLLEGE

ENG'D BY AMERICAN BANK NOTE CO., NEW YORK

83° LONGITUDE WEST 5° FROM GREENWICH 80° 78°

THE
CLEMSON
AGRICULTURAL
COLLEGE
RECORD

THIRTY-FOURTH YEAR

CATALOGUE
1926-1927

ANNOUNCEMENTS
1927-1928

Published quarterly by the Clemson Agricultural College, Clemson College, S. C.
Entered as second class matter April 25, 1905, at the Post Office at Clemson
College, South Carolina, under the Act of July 16, 1894, now superseded by
the Act of August 24, 1912.

1927

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	..	..	1	2	3	4	5	..	..	1	2	3	4	5	..	..	..	..	..	1	2	..
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	..	..	..	..	..	27	28	29	30	31	..	..	24	25	26	27	28	29	30
30	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	1	2	3	4	..	..	..	..	1	2	..	..	1	2	3	4	5	6	..
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
29	30	31	..	..	..	..	26	27	28	29	30	..	..	24	25	26	27	28	29	30	28	29	30	31	..	..	..
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	1	..	..	1	2	3	4	5	..	..	..	1	2	3	..	..
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
25	26	27	28	29	30	..	23	24	25	26	27	28	29	27	28	29	30	..	..	..	25	26	27	28	29	30	31
..	..	..	..	..	..	..	30	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

1928

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	..	1	2	3	4	..	..	..	1	2	3	1	2	3	4	5	6	7	..
8	9	10	11	12	13	14	5	6	7	8	9	10	11	4	5	6	7	8	9	10	8	9	10	11	12	13	14
15	16	17	18	19	20	21	12	13	14	15	16	17	18	11	12	13	14	15	16	17	15	16	17	18	19	20	21
22	23	24	25	26	27	28	19	20	21	22	23	24	25	18	19	20	21	22	23	24	22	23	24	25	26	27	28
29	30	31	..	..	..	..	26	27	28	29	..	..	..	25	26	27	28	29	30	31	29	30	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	1	2	3	4	5	6	7	..	..	..	1	2	3	4	..
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
27	28	29	30	31	..	..	24	25	26	27	28	29	30	29	30	31	..	..	..	..	26	27	28	29	30	31	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	..	..	1	2	3	4	5	6	..	..	..	..	1	2	3	..	..	..	..	..	1	..
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
23	24	25	26	27	28	29	28	29	30	31	..	..	..	25	26	27	28	29	30	..	23	24	25	26	27	28	29
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..

Clemson College Calendar

Session 1927-1928

1927

First Semester

- Sept. 6—Freshmen arrive. Cadet Officers, Company Commanders and First Sergeants report for duty.
- Sept. 7—Work for Freshmen begins. Opening of the 35th session.
- Sept. 7—Entrance Examinations begin 10:00 A. M.
- Sept. 8—Entrance Examinations close 6:00 P. M.
- Sept. 8-13—Freshman Week.
- Sept. 12—Re-examinations and make up work for old students begin at 8:00 A. M.
- Sept. 13—Old students arrive. Matriculation and registration. Re-examination and make up work end.
- Sept. 14—Work for old students begins.
- Oct. 21—Stated meeting of Board of Trustees.
- Nov. 12—First half of semester ends.
- Nov. 24—Thanksgiving Day—A holiday.
- Dec. 23—First day of Christmas holidays.

1928

- Jan. 3—Students return from Christmas vacation by 11:30 P. M.
- Jan. 28—First semester ends.

Second Semester

- Jan. 30—Second semester begins.
- Mar. 16—Stated meeting of Board of Trustees.
- Mar. 29—First half of second semester ends.
- May 2—Stated meeting of Board of Visitors.
- May 26—Examinations for Senior Class end.
- June 2—Examinations end.
- June 3—Commencement exercises begin Baccalaureate sermon
Closing exercises of the Y. M. C. A.
- June 4—Military exercises. Address of Alumni Orator. Alumni meeting.
- June 5—Commencement Day. Graduating Exercises.
- June 15—Stated meeting of the Board of Trustees.
- July 13—Scholarship and entrance examinations at the county seats.
- July 16—Last day for receiving scholarship applications.

NOTE: The above schedule is subject to change by the President.

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Board of Trustees

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*The president is, ex officio, a member of all committees. The first named in each instance is chairman.

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President

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Director of Arts and Science Department and Professor of English

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Director of Engineering Department, and Professor of Mechanical Engineering

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Director of Athletics and Professor of Physical Education.—(Elect.)

Faculty

WILLIAM BARRE AULL—Associate Professor of Bacteriology

B. S. Clemson Agricultural College 1907; Graduate student University of Virginia 1909-10;
Iowa State College summer 1925

THOMAS LAWRENCE AYERS—Associate Professor of Agricultural Education

B. S. Clemson Agricultural College 1918; George Peabody College summer 1926

PAUL G. BALCAR—Assistant Professor of Military Science and Tactics

LL. B. University of Iowa, 1914; Graduate The Infantry School 1922

LEONARD ROWLAND BOOKER—Assistant Professor of Industrial Education

(In charge Textile Industrial Education Practice Teaching Department, Central, S. C.)

B. S. Clemson Agricultural College 1925

MARK EDWARD BRADLEY—Professor of English

A. B. Erskine College 1898; Summer courses University of Chicago 1904 and 1910

RICHARD NEWMAN BRACKETT—Director—Professor of Chemistry

A. B. Davidson College 1883; Ph. D. Johns Hopkins University 1887

HARRINGTON COOPER BREARLEY—Professor of Economics and Sociology

A. B. University of South Carolina 1916; M. A. University of South Carolina 1917;
University of North Carolina 1922-1924; Syracuse University summer 1926

HENRY WALTER BARRE—Professor of Botany and Bacteriology

B. S. Clemson Agricultural College 1905; B. Sc. University of Nebraska 1907;

M. A. University of Nebraska 1910

- *THOMAS STEPHEN BUIE**—Head of Agronomy Division, Professor of Agronomy
B. S. Clemson Agricultural College 1917; M. S. Iowa State College 1926
- FRED HARVEY HALL CALHOUN**—Director Agricultural Department—Professor of Geology and Mineralogy
B. S. University of Chicago 1898; Ph. D. University of Chicago 1902
- MALCOLM EUGENE CAMPBELL****—Assistant Professor Carding and Spinning
New Bedford State Textile School 1922
- EDWARD LEROY CARPENTER**—Associate Professor of Mechanical Engineering
B. S. Rhode Island State College 1919
- JULIUS LAFAYETTE CARSON, Jr.**—Coach-Elect
B. S. Clemson Agricultural College 1914
- ROBERT JOSEPH CHEATHAM**—Associate Professor of Weaving and Design
B. S. Clemson Agricultural College 1916
- ELWYN LORENZO CLARKE**—Professor of Civil Engineering
B. S. University of Illinois
- GILBERT HOOPER COLLINGS**—Assistant Professor of Agronomy
B. A. Virginia Polytechnic Institute 1915; M. S. University of Illinois 1917;
Ph. D. Rutgers University 1925
- JOSH C. CODY**—Head Coach-Elect
Vanderbilt University
- OTIS R. COLE**—Commandant, Director of Military Department and Professor of Military Science and Tactics
General Staff Corps Eligible List; Graduate School of the Line 1921;
Graduate Command and General Staff School 1924
- WILL GILES CRANDALL**—Head of Education Division and Professor of Education
B. S. Cornell University 1918
- JULIAN PEARSE CROWGEY**—Assistant Professor of Architecture
Emory and Henry College; B. A. Carnegie Institute of Technology 1925
- DAVID WISTAR DANIEL**—Director of Arts and Science Department—Professor of English
A. B. Wofford College 1892; M. A. Vanderbilt University 1901; Summer session Chicago University 1899; Litt. D. Wofford College 1914
- FRANK TOWNES DARGAN**—Professor of Electrical Engineering
B. S. and M. M. P. Furman University 1898; M. S. Furman University 1899;
Summer sessions University of Michigan and Cornell University

*Leave of absence at Iowa State College 1926-1927

**On leave.

- CHARLES STEBBINS DOGGETT**—Professor of Textile Chemistry and Dyeing
Oberlin College; University of Leeds; University of Munich; Swiss Federal Polytechnic;
Royal Prussian Polytechnic; M. S. Clemson Agricultural College
- IVY WILLIAM DUGGAN**—Assistant Professor Agricultural Education
(In charge Agricultural Practice Teaching Department at Seneca, S. C.)
B. S. Clemson Agricultural College 1919
- DAVID DUNAVAN**—Assistant Professor of Entomology and Zoology
B. S. Oregon Agricultural College 1925; Graduate work Iowa State College
- SAMUEL BROADUS EARLE**—Director of Engineering Department—
Professor Mechanical Engineering
A. B. Furman University 1898; A. M. Furman University 1899;
M. E. Cornell University 1902
- ROBERT KNIGHT EATON**—Professor of Carding and Spinning
A. B. Bowdoin 1905; Philadelphia Textile School
- ROBERT OLIVER FEELEY**—Professor of Veterinary Science
D. V. S. New York University 1906
- CHARLES MANNING FURMAN**—Emeritus Professor of English
A. B. Furman University 1859
- WILLIAM EMERA GODFREY**—Professor of Physics
A. B. and A. M. Mercer University 1893, 1898; University of Chicago;
Cornell University
- BEN EDMUND GOODALE**—Associate Professor of Dairying
B. S. Iowa State College 1922
- HOWARD EMMIT GLENN**—Assistant Professor of Civil Engineering
B. S. in C. E. University of Kentucky 1922; C. E. University of Kentucky 1927
- ROBERT WILLIAMS HAMILTON**—Acting Head of Agronomy
Division—Professor of Agronomy
B. S. North Carolina State 1916
- ERNEST A. HIGGINS**—Assistant Professor of Military
Science and Tactics
Graduate The Infantry School 1924
- ALESTER GARDEN HOLMES**—Professor of History
B. S. The Citadel 1897; University of Chicago Summer 1911
- JOSEPH EVERETT HUNTER**—Associate Professor of Mathematics
B. S. Clemson Agricultural College 1896; University of Chicago summers 1902, 1904, 1906
- WARD CHARLES JENSEN**—Acting Head of Agricultural Economics
Division—Professor of Agricultural Economics
B. S. University of California 1917; M. S. in Agr. Cornell University 1919;
Ph. D. University of Wisconsin 1927
- JAMES MASSIE JOHNSON**—Associate Professor of Forge and Foundry
Miller School; Virginia Polytechnic Institute; Ohio State University
- RICHARD W JOHNSON**—Assistant Professor of Military Science
and Tactics
Graduate The Infantry School 1922
- BURR HARRISON JOHNSTONE**—Assistant Professor of Mathematics
Newberry College; B. A. University of South Carolina 1884; University of Chicago;
Summer Cornell University, University of Virginia
- WILLISTON WIGHTMAN KLUGH**—Associate Professor of Drawing
B. S. Clemson Agricultural College 1896; Vanderbilt University 1898;
Cornell University summer 1900

RUDOLPH EDWARD LEE—Professor of Architecture

B. S. Clemson Agricultural College 1896; Summer Cornell University;
University of Pennsylvania; Zanerian Art School

JOHN DEWEY LANE—Assistant Professor of English

A. B. Newberry College 1920; M. A. University of Virginia 1924;
Columbia University summer 1923

WILLIAM LEROY LIPPINCOTT—Professor of Chemistry

B. of Chemistry Cornell University 1918; Year graduate work Cornell University 1920

JOSEPH PAUL LaMASTER—Head Dairy Division—Professor of Dairying

B. S. University of Kentucky 1913; graduate work University of Kentucky 1915

JOHN THOMAS McALISTER—Associate Professor Agricultural Engineering

B. S. Mississippi Agricultural and Mechanical College 1916;
Graduate work Iowa State College one quarter 1925

JOHN ERNEST McLEAN—Assistant Professor Agricultural Education (In charge Agricultural Practice-Teaching Department, Central, S. C.)

B. S. Alabama Polytechnic Institute 1924; graduate work Cornell summer 1926

SAMUEL MANER MARTIN—Professor of Mathematics

B. S. The Citadel 1896; Summer Cornell University 1900; Harvard University 1904;
Chicago University 1908.

JOHN LOGAN MARSHALL—Associate Professor of Wood Work

Georgia School of Technology; B. S. Clemson Agricultural College 1909;
Summer Bradley Polytechnic Institute 1919

WILLIAM HAYNE MILLS—Professor of Rural Sociology

A. B. Davidson College 1892; B. D. Columbia Theological Seminary 1897

JACK HARRIS MITCHELL—Professor of Chemistry

B. S. Alabama Polytechnic Institute 1903; M. S. Alabama Polytechnic Institute 1904;
M. S. University of Illinois 1911.

CHARLES LEE MORGAN—Professor of Poultry Husbandry

B. S. University of Kentucky 1918, One year graduate work Iowa State College
and University of Kentucky

GEORGE MOSELEY MURPHY—Assistant Professor of Chemistry

B. S. University of North Carolina 1924; M. S. University of North Carolina 1925

ALBERT MYERS MUSSER—Acting Head Division of Horticulture—Professor of Horticulture

Pennsylvania State College; B. S. A. University of Florida 1918

CHARLES CARTER NEWMAN—Professor of Horticulture

Alabama Polytechnic Institute; B. S. Clemson Agricultural College 1896

ARTHUR W. PENROSE—Assistant Professor of Military Science and Tactics

B. S. E. Temple University; Graduate The Infantry School 1925

VERD PETERSON, M. S.—Consulting Professor of Agricultural Education

State Supervisor of Agricultural Education, Columbia, S. C

FRANK H. POLLARD—Associate Professor of Chemistry

B. of Chemistry Cornell University 1916; Ph. D. Cornell University 1922

ELIJAH HUGH RAWL—Acting Associate Professor of Horticulture

B. S. Clemson Agricultural College 1921; M. S. University of California 1923

SAM ROSEBOROUGH RHODES—Professor of Electrical Engineering
 B. L. Furman University 1900; M. S. Furman University 1901;
 B. S. Clemson Agricultural College 1907; Course General Electric Company 1907-1909

ORESTES PEARLE RHYNE—Professor of Modern Languages
 A. B. ~~Lenoir~~-Rhyne 1907; A. B. and A. M. University of North Carolina 1908, 1909;
 Ph. H. Johns Hopkins University 1913

FRANK HILL ROBINSON—Assistant Professor Agricultural Economics
 B. S. A. University of Tennessee, 1920
 M. S. A. Texas Agricultural and Mechanical College 1923

DUANE B. ROSENKRANS—Associate Professor of Botany
 A. B. Upper Iowa University 1911; M. A. University of Wisconsin 1917

AUGUSTUS G. SHANKLIN—Professor of Mathematics
 B. S. The Citadel 1893; Summer Cornell University 1908; Columbia University 1911

FRANKLIN SHERMAN—Professor of Entomology and Zoology
 B. S. Agr. Cornell University 1900; M. S. Maryland Agricultural College 1912

WALTER OSCAR SHUBERT*—Associate Professor of Machine Shop
 Ohio State University; University of South Dakota

LAWRENCE VINCENT STARKEY—Professor of Animal Husbandry
 B. S. University of Illinois 1914; M. S. University of Wisconsin 1914

LUTHER CLYDE STILL—Assistant Professor of Physics
 B. S. University of Georgia 1923; University of Georgia summer 1924

HAROLD SIMMONS TATE—Assistant Professor of Industrial
 Education
 B. S. Clemson Agricultural College 1925; Graduate work half year Columbia Uni. 1926

LeROY TUCKER—Professor of Mechanics
 A. B. Washburn College 1912; B. S. in Ry. C. E. University of Illinois 1923

CLEMON M. WILSON, A. B., A. M.—Consulting Professor of
 Industrial Education
 State Supervisor of Industrial Education, Columbia, S. C.

INSTRUCTORS

JAMES EDWARD CARVER—English
 B. A. University of Richmond 1926

CARL LAFAYETTE EPTING—History
 A. B. Newberry College 1921; A. M. University of South Carolina 1924

BOYCE DeWITT EZELL—Horticulture
 B. S. Clemson Agricultural College 1924; M. S. Michigan State College 1925

SUE MATTHEWS FITZPATRICK—English
 B. S. University of Kentucky 1914

EDWIN JONES FREEMAN—Engineering
 B. S. Clemson Agricultural College 1922

KENNETH H. FREER—Drawing
 New School of Design 1921; University of Pennsylvania 1922

DAVID NIVIN HARRIS—Drawing
 B. S. Clemson Agricultural College 1908

HAROLD JASPER HENDERSON—Entomology and Zoology
 B. S. Clemson Agricultural College 1925

*Resigned.

FRANCIS MARION KINARD—English

A. B. Wofford College 1923; University of South Carolina

ROWLAND LINWOOD LEE, JR.—Textile

B. S. Clemson Agricultural College 1925; Georgia School of Technology

ARTHUR ERNEST McKENNA—Textile

Graduate Rhode Island School of Design 1922; Bradford-Durfee Textile School 1925

WILLIAM RICHARD METCALF—English

A. B. University of Kentucky 1924; A. M. Emory University 1925

LUCIEN EVANS MYERS, JR.—Chemistry

Ph. G. Alabama Polytechnic Institute 1923; B. S. Alabama Polytechnic Institute 1925

GEORGE WILSON NICHOLSON—Mathematics

B. S. The Citadel 1919; LL. B. and M. A. University of South Carolina 1922

FRERE RAWLINSON—Physics

Furman University; B. S. University of South Carolina 1926

ALBERT RAYMOND REED—Physics

A. B. Wofford College 1925

MYRON ARTHUR RICE—Botany

B. S. University of California 1916; M. S. in Agr. Cornell University 1925

ROBERT RUSSELL RITCHIE—Animal Husbandry

B. S. Iowa State College 1926

JAMES HAGOOD SAMS—Engineering

B. S. Clemson Agricultural College 1925; E. E. Cornell 1926

WALTER BACKUS WILSON—Engineering

General Electric Engineering School; Lowell Institute of M. I. T., Graduate 1922

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Methodist

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HUGH MILTON STACKHOUSE
Secretary Board of Fertilizer Control

BENJAMIN F. ROBERTSON, B. S.
Chemist (Fertilizer Analysis)

JOHN TREUTLEN FOY, B. S.,
Assistant Chemist (Fertilizer Analysis)

BENJAMIN FREEMAN, B. S.,
Assistant Chemist (Fertilizer and Miscellaneous Analysis)

DONALD B. RODERICK
Assistant Chemist (Miscellaneous Analysis)

MARGARET E. GASQUE,
Clerk to the Board of Fertilizer Control

Agricultural Experiment Station Staff

- ✓ H. W. BARRE, A. M., Botanist and Director.
- G. H. AULL, B. S., Assistant to Director of Research.
- ✓ G. M. ARMSTRONG, Ph. D., Head of Division of Boll Weevil Control.
Florence, S. C.
- ✓ W. B. ALBERT, Ph. D., Assistant Plant Physiologist, Florence, S. C.
- ✓ W. B. AULL, B. S., Associate Bacteriologist.
- J. A. BERLY, B. S., Assistant State Entomologist†.
- R. N. BRACKETT, Ph. D., Chemist.
- A. B. BRYAN, B. S., B. Litt., Agricultural Editor.
- T. S. BUIE, B. S., M. S., Agronomist*.
- O. L. CARTWRIGHT, M. S., Assistant Entomologist.
- R. E. CURRIN, Supt. of Pee Dee Experiment Station, Florence, S. C.
- E. W. DUNNAM, M. S., Assistant Entomologist, Boll Weevil Control**,
Florence, S. C.
- A. L. DuRANT, M. S., Assistant Animal Husbandman.
- C. O. EDDY, M. S., Associate Entomologist.
- R. O. FEELEY, D. V. S., Consulting Veterinarian.
- L. M. FENNER, M. S., Assistant Pathologist.†
- F. A. FENTON, Ph. D., Entomologist Boll Weevil Control**, Florence, S. C.
- MARY E. FRAYSER, M. A., Research Specialist in Home Economics
- BURNS GILLISON, Foreman Experiment Station Farm.
- E. E. HALL, M. S., Agronomist Boll Weevil Control, Florence, S. C.
- R. W. HAMILTON, B. S., Acting Agronomist.
- W. C. JENSEN, M. S., Agricultural Economist.
- E. D. KYZER, B. S., Supt. Coast Experiment Station, Summerville, S. C.
- J. P. LaMASTER, B. S. Agr., Dairyman.
- C. A. LUDWIG, Ph. D., Associate Botanist and Plant Pathologist.
- L. C. McALISTER, Assistant Entomologist.
- W. H. MILLS, A. B., B. D., Specialist in Agricultural Economics.
- J. H. MITCHELL, M. S., Chemist.
- C. L. MORGAN, B. S., Poultryman.
- K. S. MORROW, M. S., Assistant Dairyman.
- A. M. MUSSER, B. S., Acting Horticulturist.
- C. S. PATRICK, B. S., Head Farms Division.
- F. H. ROBINSON, M. S., Assistant in Agricultural Economics**.
- J. A. RILEY, M. S., Supt of Sand Hill Station, Pontiac, S. C.
- E. H. RAWL, M. S., Acting Associate Horticulturist.
- W. B. ROGERS, B. S., Assistant Agronomist.
- B. A. RUSSELL, B. S., Asst. in Agricultural Economics.
- FRANKLIN SHERMAN, M. S., Entomologist.
- L. V. STARKEY, M. S., Animal Husbandman.
- J. D. WARNER, M. S., Assistant Agronomist.

*On leave.

**Detailed by United States Department of Agriculture

†S. C. State Crop Pest Commission.

Mail and Telegraph Offices: Clemson College, S. C.

Freight and Express Offices: Calhoun, S. C.

The bulletins and circulars of the Station are issued at irregular intervals and are sent free to all citizens of the state who apply for them.

Agricultural Extension Staff

- W. W. LONG, B. S., LL. D., Director Extension
D. W. WATKINS, B. S., Assistant Director
A. B. BRYAN, B. S., B. Litt., Agricultural Editor
*T. S. BUIE, M. S., Chief Agronomy Division
J. L. CARBERY, Extension Agronomist (Plant Breeding) Spartan-
burg, S. C.
J. R. DETHERAGE, Assistant Agricultural Editor
E. G. GODBEY, B. S., Extension Livestock Specialist, Spartanburg, S. C.
R. W. HAMILTON, B. S., Acting Chief Agronomy Division
L. R. HAWKINS, M. S., Livestock Agent, Florence, S. C.
S. L. JEFFORDS, Extension Agronomist, Spartanburg, S. C.
W. J. KEEGAN, B. S., Extension Agent in Dairying, Florence, S. C.
J. P. LaMASTER, B. S., Chief Dairy Division
I. D. LEWIS, B. S., Agent Boys' Club Work
L. H. LEWIS, Extension Agent in Marketing, Florence, S. C.
W. D. MOORE, Ph. D., Extension Plant Pathologist
C. L. MORGAN, B. S., Chief Poultry Division
A. M. MUSSER, B. S., Acting Chief Horticultural Division
C. A. OWENS, B. S., Specialist in Packing and Grading, Spartan-
burg, S. C.
J. O. PEPPER, B. S., M. S., Extension Entomologist
E. S. PREVOST, Bee Keeping Specialist
GEO. E. PRINCE, B. S., Agent in Marketing, Aiken, S. C.
FRANKLIN SHERMAN, M. S., Chief Division of Entomology
A. E. SCHILLETTER, B. S., Extension Horticulturist.
L. V. STARKEY, M. S., Chief Animal Husbandry Division
H. H. TRYON, Forestry Engineer, Aiken, S. C.
R. E. WATERS, B. S., Extension Agent in Dairying, Spartanburg, S. C.
B. O. WILLIAMS, B. S., Agent Boys' Club Work

*On leave

Staff located at Clemson College except where another address is given

District Agents

A. A. McKeown	First District	Spartanburg, S. C.
J. T. Lazar	Second District	Florence, S. C.
A. H. Ward	Third District	Aiken, S. C.

County Agents.

Name	County	Post Office
	Allendale	Allendale
Z. D. Robertson	Abbeville	Abbeville
C. Lee Gowan	Aiken	Aiken
S. M. Byars	Anderson	Anderson
	Bamberg	Bamberg
H. G. Boylston	Barnwell	Blackville
	Beaufort	Beaufort
C. L. McCaslan	Calhoun	St. Matthews
J. H. Harvey	Berkeley	Pineopolis
G. C. McDermid	Charleston	Charleston
Ralph Coarsey	Chester	Chester
W. J. Tiller	Chesterfield	Chesterfield
S. C. Stribling	Cherokee	Gaffney
F. M. Rast	Clarendon	Manning
	Colleton	Walterboro
J. M. Napier	Darlington	Darlington
S. W. Epps	Dillon	Dillon
T. M. Cathcart	Dorchester	St. George
W. H. Barton	Edgefield	Edgefield
R. H. Lemmon	Fairfield	Winnsboro
J. W. McLendon	Florence	Florence
M. M. McCord	Georgetown	Georgetown
W. R. Gray	Greenville	Greenville
E. L. Rogers	Greenwood	Greenwood
T. M. Evans	Horry	Conway
J. K. Dorman	Hampton	Hampton
J. P. Graham	Jasper	Ridgeland
J. W. Sanders	Kershaw	Camden
W. F. Howell	Lancaster	Lancaster
C. B. Cannon	Laurens	Laurens
	Lee	Bishopville
C. S. Addy	Lexington	Lexington
W. R. Wells, Jr.	Marion	Marion
	Marlboro	Bennettsville
T. M. Morgan	McCormick	McCormick
T. M. Mills	Newberry	Prosperity
G. H. Griffin	Oconee	Walhalla
R. F. Kolb	Orangeburg	Orangeburg
T. A. Bowen	Pickens	Pickens
J. R. Clark	Richland	Columbia
J. M. Eleazer	Sumter	Sumter
Claude Rothell	Saluda	Saluda
Earnest Carnes	Spartanburg	Spartanburg
W. D. Wood	Union	Union
C. L. Baxter	Williamsburg	Kingstree
L. W. Johnson	York	Sharon

Livestock Sanitary Work Staff*

W. K. LEWIS, V. S., M. D. V., State Veterinarian and Director

R. A. MAYS, Laboratory Veterinarian

Assistant State Veterinarians

M. L. BOYD

F. K. PETERSON

E. T. FISHER

C. C. RAYFIELD

H. P. HOOD

G. C. WALDING

W. D. McCORMACK

S. M. WITHERSPOON, Jr.

*Office located in Columbia, S. C.

PART II.—GENERAL INFORMATION

Requirements For Admission

All applicants for admission must be at least sixteen years of age and at the time of entrance must be free from contagious or infectious disease. A certificate of good moral character and honorable discharge from the last school attended is required.

Admission to the college may be gained in one of the following ways:

(1) **On certificate from an accredited high school.** Graduates from a high school who present a certificate showing the completion of fifteen standard high school units as explained below will be admitted to the Freshman Class without examination. The applicant must submit to the Registrar a transcript of his high school record showing the subjects taken each year, the length of the class periods, number of weeks each subject was taken, number of hours per week and the grade on each subject. This blank will be furnished by the Registrar on request. It must be signed by the Principal and sent to us after the applicant has completed his high school course. This part of the application should be sent direct by the Principal or Superintendent. The schools which are recognized as diploma high schools by the State Department of Education of South Carolina are regarded as accredited high schools for admission to Clemson. Applicants who are graduates of high schools outside of South Carolina will be accepted if they present certificates showing that they are graduates of a high school accredited by the Association of Colleges and Secondary Schools of the Southern States or from high schools which are accredited by their State University.

(2) **By Examination**—Students applying for admission who do not present such certificates as are described above are required to stand the entrance examinations. For date of these examinations see the college calendar on page 5.

Applicants who are not graduates of accredited high schools and who can give acceptable documentary evidence of having completed the equivalent of fifteen units of work under formal instruction will be required to take examinations on English, Mathematics, History and one other subject selected by the Registrar. If they pass these examinations the other units presented will be accepted and they will be considered as having met the entrance requirements and their other units will be validated. All other applicants will be required to take the entrance examinations for the full fifteen units.

Of the units listed below when presented for admission to the Freshman class at least three units must be in English, two and a half in Mathematics, and two in History. The remaining seven and a half units may be selected from any of the subjects listed below with the conditions noted. The scope of the examination is in keeping with the State High School curriculum.

High School Subjects Accepted For Admission To The Freshman

Class	
English—	Laboratory Sciences—
Grammar (High School text completed)	General Science 1
Composition and Literature	Biology 1
History—	Chemistry 1
Ancient (full course)	Physics 1
Ancient short course	Physical or High School Geography 1
Community Civics (half year)	Modern Language—**
Modern History	French 2
American History and Government, or Civics	Spanish 2
Mathematics—	German 2
Arithmetic	Vocational Subjects—
Algebra, to quadratics	Agriculture 1 to 4
Algebra, through quadratics	Bookkeeping 1
Algebra, through progressions and binomial theorem	Manual Training 1 to 2
Plane Geometry	Stenography and Typewriting 1 to 3
Solid Geometry	Textile 1 to 2
Trigonometry	
Latin—*	
Beginners' or First Year and Caesar, 4 books	2
Cicero, 6 orations	1
Virgil, 6 books	1

*No credit is given for 36 weeks' work in Beginners' or First Year Latin.

**Credit depends upon the time devoted to the subject and the quantity of work accomplished. No credit is allowed for less than 72 weeks' work in Modern Languages.

General Information Regarding Admission of Students to all Courses

Students desiring to enter College should apply to the Registrar for application blanks, and these, properly filled out, should be returned to the Registrar as soon as possible as late applicants may be crowded out.

Certificates of good moral character are required of all candidates; and if the candidate comes from another college, this certificate must show that he was honorably discharged.

In the admission of students who have met the requirements of the college, the following will be observed.—

1. Students must undergo a medical examination, and no student will be admitted who is not healthy and free from contagious diseases including tuberculosis and venereal diseases. Vaccination is required of all students admitted.

2. In case the number of applicants exceeds the capacity of the college, students will be apportioned among counties in proportion to representation in the House of Representatives, under the following rules and regulations:

(a) As between applicants of equal preparation, the eldest will have the preference.

(b) Other things being equal, the first applicants will receive first consideration.

(c) When a county has not sent its quota, the places thus left shall be apportioned among the other applicants.

(d) Provided there is room in the barracks after the needs of the State have been met, students from outside the State may be admitted, and when once admitted may continue in college until the completion of their courses.

3. Applicants not entering promptly at the required date will have their rights given to applicants next on the roll.

Students upon arrival at the college at the opening of the session must report at once to the Registrar's office and matriculate before they will be assigned to quarters in the barracks. No student will be admitted to any of the classes or examinations of the college before matriculation and payment of fees.

Matriculation is equivalent to a pledge to conform to the rules of the college.

Examinations—Scholarship and entrance examinations are held by each County Superintendent of Education on the second Friday in July. Applicants who wish to compete for scholarships and applicants who are not graduates from accredited high schools should take these examinations. If the applicant finds through these examinations that he is unprepared to enter college, he will be saved the expense of a trip to the college in September.

Entrance examinations are also given at the College Administrative Building in September as shown below.

September 7—10 A. M.—Biology, English.

2 P. M.—Physics

4 P. M.—Chemistry

September 8— 8 A. M.—Mathematics

10 A. M.—History

12 M.—Latin, General Science

2 P. M.—Agriculture, French, German, Spanish

4 P. M.—Plane Geometry.

Applicants expecting to gain admission by taking entrance examinations are expected to be present and prepared to take these examinations as scheduled. A fee of two dollars will be charged for entrance examinations at any other date and can be taken then only thru special permission.

Examinations will be held at the county seats on Friday, July 8, 1927. This examination will cover English; Mathematics—Algebra, Geometry; History; Agriculture.

No student's matriculation will be completed until he has met all entrance requirements.

Admission to Advanced Standing.—Work that has been taken in other colleges will be credited for an equivalent amount of work so far as it applies to any course offered in the college. The applicant must present: (a) a letter of honorable dismissal from the institution last attended, and (b) an official transcript of his record, including entrance credits. College credits given by transfer are provisional and may be cancelled at any time if the student's work is unsatisfactory. A student coming from another institution must spend at least one regular session in the college before he is eligible to apply for a degree. College credit may be given a graduate of an accredited secondary school by examination only.

Admission of Special Students—A limited number of persons properly recommended and over twenty-one years of age may be admitted as special students with the opportunity of pursuing special lines of study or investigation in any of the subjects taught in the college provided they can show evidences of seriousness of purpose. To be admitted as a special student a person must be recommended by the local Superintendent of Schools or by a responsible person from the industry or line of work which represents the special work he wishes to take in college. Each case must be passed on individually and approved by the President. Special students are not permitted to live in barracks but are subject to the general regulations of the college requir-

ing regular attendance, excellent conduct and diligent work. Degrees are not given special students but a certificate of proficiency will be given when the work completed is deemed worthy.

In very exceptional cases the President may designate a mature student who meets all entrance requirements as a special student and a candidate for a degree.

Registration—Students are required to register for classes as early as possible. A specified time is set for this work and all students are required to register during that period. Any student who fails to do so will be required to pay a fee of \$2.00 for late registration.

No student will be admitted to classes who has not paid all dues and fees.

No student will be admitted to classes after the sixth day of the semester without special permission which will be given only for reasons acceptable to the Registrar. Students registering late but within the first week of the semester will have a .1 credit of the course deducted. Reduction of credit will likewise be made for later registration depending on the time the student enters and the grade he makes. In no case can full credit be given a student who registers late unless the late registration is initiated by the college.

Procedure—Full instructions regarding registration will be furnished by the Registrar.

RULES FOR PROMOTION

1. The semester hour shall be the basis of all credits. One recitation hour or three laboratory or shop hours a week if self contained, or two if considerable work is required out of the class period, shall constitute a semester hour.

2. The standing of a student in his work at the end of a semester shall be based on daily class work, regularity of attendance, tests or other work, and the final examinations.

3. Written examinations shall be required in all subjects at the end of each semester, except in certain laboratory or practical courses where not deemed necessary by the departmental faculty. A student who has been absent from more than one-fourth of the total number of class periods in any subject for a semester is debarred from the final examination.†

4. A semester grade once reported to the Registrar shall be the final grade for the period covered.†

5. Separate grades shall be given on theoretical and practical work except where in the judgment of the departmental faculty separate grades are not practical.

6. No semester grade shall be given out until the close of the examination period for that class.

7. When an instructor completes a subject he may hold an examination on it before beginning the next subject, provided such examination does not conflict with the regularly scheduled work.

8. The grading system shall be as follows—

A—Excellent. Indicates that the student is doing work of a very high character. The highest grade given.

B—Good. Indicates work that is satisfactory, though not of the highest order.

C—Fair. Indicates work of average or medium character.

D—Pass. Indicates work below the average and unsatisfactory. The lowest passing grade. For graduation a student must have a grade above D on 50 percent of his total credit hours.

E—Conditioned. Indicates a failure to satisfy the requirements as to daily recitations, tests or other work, as well as to the final examination, which condition in the opinion of the instructor may be made up by re-examination at some fixed time.

F—Failed. Indicates that a student knows so little of the subject that it must be repeated in order that full credit may be received.

I—Incomplete work. Indicates an absence from examination on account of sickness or other satisfactory reason, or that a relatively small part of the semester's work remains undone. A grade I is not to be given a student who has made a grade F on his daily work.

9. Absences from Class or Examination. Removal of Grade I:

A student who has been absent from more than one-fourth of the total class periods in a subject during a semester may be dropped from the class. Such a student who is permitted to continue in class shall not stand the final examination until the work missed has been made up.

All work missed on account of absences for good and sufficient reasons shall be made up to the satisfaction of the instructor within thirty days after the student returns to classes.

All incomplete grades (I's) not removed before the first class day of the first semester shall become failures, (F's) and must be taken over as such.

A student who, for reasons satisfactory to the faculty, is absent from any of the first semester examinations will be allowed to make up these examinations during the second semester at the convenience of the instructor or during the re-examination period just before Commencement. A student who is absent from any of the second semester examinations shall stand them during the make-up period in September. A student who is absent from an examination without excuse is graded E.

10. Removal of Conditions:

Only one opportunity shall be given a student to remove a condition (E) by a re-examination. A student who fails to pass such a re-examination shall be required to repeat the subject hour for hour in class. Not more than twelve credit hours of conditions for a session shall be removed by re-examination. A student shall not receive a grade higher than D when a deficiency is removed by re-examination.

First semester re-examinations shall be held just before Commencement in June, and second semester re-examination just before the opening of college in the fall. All conditions (E's) not removed before the first class day of the first semester shall become failures and be repeated as such. Seniors may remove conditions during the week preceding Commencement.

11. Removal of Failures:

A student who has failed (made a grade F) in a subject cannot receive credit for that subject until it has been repeated hour for hour in class, except that in the case of correlated laboratory work, the number of hours to be taken shall be determined by the instructor. Where separate grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs.

12. Withdrawals on Account of Unsatisfactory Work:

A student who at the end of the first semester has failed (made a grade F) on 9 or more credit hours of work shall be required to withdraw from college. A student who at the end of the session has failed (made a grade F) on 18 or more credit hours of work shall not be permitted to return the following session. (Should the application of this rule at the end of the first semester not be to the best interest of an individual student, he may be permitted to continue on probation and schedule a fewer number of hours. Such a student carrying less than a normal schedule must pass on all his work at the end of the next semester or be required to withdraw.)

Any student whose record is generally unsatisfactory at the end of a semester may be dropped from the college, provided the student and his parent or guardian were warned at mid-semester of this probable action.

13. Amount of Class Work Permitted and Required. Prerequisites:

The normal amount of work a student is expected to schedule shall be the number of credit hours listed in the curriculum which he is pursuing. A student shall not be permitted to schedule extra subjects or take over in addition to his normal schedule any work unless he has made during the preceding semester a grade of B, or

above, on at least 50 percent of the total scheduled credit hours. Not more than five clock hours of work may be scheduled in addition to the number of credit hours prescribed in the curriculum.

A continuation subject in the next higher class shall not be scheduled until credit has been received for its prerequisites.

14. Dropping Class Work:

Upon the recommendation of the instructor concerned and approval of the Director, a student may be required to drop a subject because of neglect, excessive absences, or lack of application or preparation. A student required to drop a subject shall be placed on probation for the remainder of the semester, and his parent or guardian shall be notified.

A student who at the end of a semester makes a grade F on 6, but not more than 8, credit hours of work or who makes a grade E on 10 or more credit hours of work, shall be required to drop from his schedule at least one theoretical subject. (See Rule 12.)

15. Time of Scheduling Work:

All students shall register for classes during the first two days of the semester. No subject may be added or scheduled by a student after the sixth class day of a semester.

16. Deficiencies in Year Courses:

A student who is conditioned (makes a grade E) on the first and second semester's work of a subject continuing throughout the session shall be required to repeat the subject in class at the next recurrence.

17. How to Raise a Grade E:

A grade E may be removed as prescribed in Section 11. However, if a student makes a grade E in a subject which continues beyond the first semester and to the end of the second semester, the instructor may at the end of the session recommend that the grade be raised to a D, provided the grade made on the work of the second semester is A or B. In such a case the recommendation of the instructor shall be made a special report, must be approved by the Director of the department, and must accompany the grades of the second semester.

18. Promotion to the Senior Class:

A student shall not be permitted to enroll in the senior class until all the work of the freshman and sophomore classes has been completed.

19. Requirements for Graduation:

For graduation a student must have completed as many credit hours as are required in his course with a grade above D

on 50 percent of the total credit hours. All work must be completed before 5 P. M. on the Saturday preceding Commencement.

Residence of at least one regular session shall be required for graduation.

20. Seniors Failing to Graduate:

A senior who fails to graduate because of either one E or one F on any subject shall have an opportunity of removing it by examination during the make-up period in September, provided he can furnish evidence of having done satisfactory study. Failing to do this he shall take the subject over with the next class. In either case, the degree will not be awarded until the following Commencement.

21. Change in Course: Aimless shifting is discouraged; but for good reasons a change in course for freshmen and sophomores may be made during the first thirty days of the session.

22. Honors.

The names of all cadets who at the end of each semester have no failures, no work to make up, and not more than 30 demerits, shall be published and a notice sent to their parents.

23. Textbooks and Supplies:

Each student shall be required to own his individual text books and the necessary equipment, except in the case of brothers in the same class who room together.

All requests from the students to the faculty must be made in writing.

DEGREES, DIPLOMAS, AND CERTIFICATES

The degree of **Bachelor of Science** is awarded to those students who satisfactorily complete one of the four-year curricula. The course completed is specified on each diploma.

All work for a degree must be completed by 5 P. M. on the Saturday preceding Commencement. Residence of at least one regular session is required for graduation. Diplomas are delivered to the candidates on Commencement Day.

Every candidate for a degree must pay to the Treasurer of the College prior to graduation the cost of the diploma.

Certificates.—Students who satisfactorily complete one of the two-year courses are given certificates.

MEDALS AND HONORS

Honorable Mention.—Students who at the end of a semester have no failures, no work to make up, and not over thirty demerits, will have their names publicly announced, printed in "The Tiger," and notification sent to their parents.

Trustees' Medal.—The Board of Trustees has established a gold medal to be awarded annually to the best speaker among the representatives of the literary societies at Commencement. These representatives are chosen by judges selected by the societies at the annual public exercises in Memorial Hall. The medal is awarded by judges selected by the Faculty. (The medal was won in 1926 by Cadet R. H. Cain of York County.)

Norris Medal.—The following is from the will of Hon. D. K. Norris, a life trustee of Clemson, who died in 1905:

"I give \$500 face value, Norris Cotton Mill stock, to the Trustees of Clemson Agricultural College of South Carolina, on condition the dividend thereon shall be applied annually to the purchase of a gold medal, to be known as the 'Norris Medal,' to be awarded to the student of Clemson meriting the same at graduation, under such rules and conditions as may be prescribed by the said Board or Trustees, and which medal shall have engraved on it 'Honor habet onus' (Honor brings responsibility)."

In 1926 the medal was awarded to J. B. McKerley of Barnwell County.

R. W. Simpson Medal.—A medal designated as the "R. W. Simpson Medal" is awarded annually to the best drilled cadet in the freshman, sophomore, or junior class. In 1926 the medal was awarded to C. N. Whilden of Sumter.

Literary Society Medals.—It is customary for the several literary societies to hold annual contests during the session. Gold medals are usually awarded to the best debaters, orators and declaimers.

The Chronicle Medals.—The Chronicle, the monthly magazine published by the literary societies, also usually awards three gold medals, for the best story, the best poem, the best essay contributed by students during the year.

Farmers' Certificates of Merit.—Beginning with the session of 1914-1915 certificates of merit have been awarded each session to two farmers in South Carolina who have rendered distinguished services in the agricultural development of the state.

In 1926 the certificates were awarded to Claude W. Kress, Buckhead Farm, Yemassee, S. C., and S. Pressley Coker, Hartsville, S. C.

FEES AND EXPENSES

Settlement of College Fees.—College remittances should be made in cash, by money order, New York Exchange, or by local check, made payable to S. W. Evans, Treasurer. All required fees must be paid before a student can be assigned to a room in the barracks or permitted to begin work.

Juniors and seniors who have the permission of the President may secure board or board and room in the community. Meals may be had at the Clemson Hotel, Y. M. C. A. Cafeteria, The Coffee Shoppe, or at private homes. Room and board cost \$30 to \$35 per month; meals alone about \$25 per month. The rooming place of every such student must be approved by the college authorities. Lists of available rooms may be secured by addressing the Registrar.

The fees and living expenses will be approximately as listed below. A leaflet giving the exact cost, including uniforms, will be mailed to the parents of all applicants prior to the opening of college in September. The cost of books, which varies with the class and course, is not included in the figures given below:

Living Expenses—

Board at \$18.50 a month.....	\$166.50
Laundry at \$1.50 a month.....	13.50
Heat, light and water at \$2.10 a month.....	18.90
Total Living Expenses.....	198.90

Fees—

Student Activity Fee.....	\$ 16.00
Incidental Fee.....	9.00
Laboratory Fee.....	2.25
Breakage Fee.....	3.00
Hospital Fee.....	11.25
Matriculation Fees.....	3.00

Total for All Required Fees.....	\$ 44.50
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Total Living Expenses and Required Fees.....	\$243.40
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Tuition for resident students who pay, add.....	40.00
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Non-resident students pay \$80.00 tuition	
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These figures do not include the cost of uniforms. See information in paragraph headed "Uniforms."

All payments are to be made quarterly in advance as follows:

Payable on	With Tuition	With Free Tuition	With Scholarship
Entrance -----	\$75.35	\$65.35	\$40.35
Nov. 12, 1927 -----	69.35	59.35	34.35
Jan. 28, 1928' -----	69.35	59.35	34.35
Mar. 24, 1928 -----	69.35	59.35	34.35
Total -----	\$283.40	\$243.40	\$143.04

Uniforms.—All students are required to wear the regulation uniform of the college. The cost of the uniform garments needed by a student must be deposited with the Treasurer of the college at matriculation in September. The uniforms are made to individual measure and are purchased on the most favorable contract obtainable from a reputable manufacturer. The uniforms are the property of the student, the college merely acts as agent for the student and makes no charge or profit for handling.

If a student takes proper care of his uniforms and certain garments are serviceable for a second year, he will not be required to purchase a complete new outfit. The cost, therefore, to old students may be considerably reduced.

Any uniform allowances made to R. O. T. C. students by the federal government will be credited to the individual when the full amount of the commutation is received by the college.

Shoes: In addition to ordinary high top black shoes each cadet will be required to have one pair of tan shoes, army style.

Medical Fee: The medical fee paid by each student is intended to cover all ordinary cases of sickness and the treatment and medicines necessary. It is not intended to cover fees of doctors or specialists called into consultation, for performing operations, for special nurses, or for any medical or surgical attentions performed away from the college. Such expenses must be borne by the parent. The right of the college surgeon, with the approval of the President of the college, to incur in behalf of any student under his care any of these extra services is hereby expressly reserved.

Student Activity Fee: This fee entitles a cadet to admission to all lyceum entertainments, athletic games, privileges of Y. M. C. A. Building, and subscription to the college papers, "The Tiger," "The Chronicle," and "Taps."

Breakage. The breakage fee of \$3.00 is a deposit to cover damages or destruction of College property when individual re-

responsibility can not be located. A student will be required to pay directly to the Treasurer for any damage done to college property for which he is personally responsible. The occupants of a room will be held responsible for any damage to property in the room.

Tuition. Tuition is \$40.00 per session, payable quarterly. Free tuition is granted to residents of South Carolina unable to pay the same, provided they comply with the State laws. All applicants for free tuition must file with the college the prescribed application to the State Board of Public Welfare. This blank will be sent to all applicants by August 15th, and must be returned properly filled in before the opening of college.

Immediately after the opening of college, the application is forwarded to the State Board of Public Welfare, which Board is required by law to investigate the financial standing of the parents or guardian, or the applicant himself, if he is of age. This Board reports its finding, together with its recommendations, to the Clemson College Board of Trustees, who may revoke or confirm the recommendations.

Any person required to pay tuition may appeal to the State Board of Education as provided by law.

Applicants filing the prescribed form will be granted free tuition pending investigation by the State Board of Public Welfare and action by the Board of Trustees. Applicants for free tuition will be notified of the results of the investigation about the first of January.

Non-resident students pay \$80.00 tuition.

All Students are required to provide themselves with two mattress covers, and two clothes bags. These are regulation articles and can be secured only at Clemson. They will last for the entire course of four years and can often be bought second hand.

Students should provide themselves with a blue overall suit.

Refunds to Students. Refunds will be made to students under the following rules:

1. A refund for uniforms will not be guaranteed to students who withdraw from the college after the uniforms have been ordered. If order cannot be cancelled the uniforms will be sent to the cadet upon receipt of the same.

2. A refund for **living expenses** will be made at the rates charged, but no refund will be made for interruptions of less than two weeks or in cases of discharge issued less than two weeks from the end of the current quarter.

3. No fees will be refunded.

4. A refund of all moneys, except the matriculation fee of \$3.00 and \$1.00 per day for board, etc. will be made to a student who fails to meet the entrance requirements and who leaves college within ten days of the date of his matriculation; provided, however that the refund for uniform cannot be guaranteed if the same has been ordered.

5. The college will not be liable for articles lost or stolen in the barracks.

6. The college will not be liable for lost or damaged laundry, unless reported within two days after the date upon which laundry was due to be delivered, and then not more than the actual depreciated value of such articles as have been lost or damaged.

BOOKS AND SUPPLIES

The L. C. Martin Drug Co. Inc., conducts a store near the campus and maintains a book and supply store where students may purchase text-books, drawing instruments, and other student supplies. A complete list of the text-books used in each course with the price of same will be furnished on application.

Optional Expenses. It is not possible to give an estimate of a cadet's expenditures for such amusements as dancing, moving pictures, etc. This depends largely upon the disposition of the young man. The college endeavors to reduce to a minimum the temptation to spend money needlessly, but the authorities cannot be responsible for a cadet's private expenditures. This must be a matter between him and his parents.

FOUR-YEAR SCHOLARSHIPS

Statement of the State Laws and College Rules Governing the Award of Four-year Scholarships

1. Each county is allowed as many scholarships as it has representatives in the General Assembly. The total number for the State is now one hundred and seventy. The number of vacancies in any particular county can be learned by making inquiry of the Registrar of Clemson College.

2. Scholarship students are required to take one of the Agricultural courses, except that one scholarship per county is allowed in the textile course. Scholarship students are not permitted to take the engineering or other courses.

3. Each scholarship pays \$100.00 per session in cash, and allows free tuition, worth \$40.00 more. The regular scholarship is good for four consecutive years unless terminated by the student's failure to maintain himself in his class and comply with the rules of the college.

The Trustees have ruled that failure to maintain himself cannot be excused on the grounds of sickness or other Providential reasons.

Scholarships are awarded by the State Department of Education on the recommendation of the State Board of Public Welfare.

4. A competitive examination is used as a basis for awarding the scholarships. The examinations are conducted by the County Superintendents of Education at the county seats, on the second Friday in July, from 9 A. M. to 4 P. M. (July 8, 1927.)

5. All applicants are required to furnish the Registrar of Clemson College, not later than July 11, 1927, the prescribed certificates showing financial inability, and the application form showing school preparation. The applicant may not be considered unless the above papers are received within the specified time.

6. The examination questions are prepared and the papers graded by the Clemson faculty. The names of the applicants who pass the examinations and who are otherwise qualified are forwarded to the State Board of Public Welfare together with the certificates of financial inability. The State Board of Public Welfare then makes an investigation into the financial standing of the applicant, his parent or his guardian. The said Board reports its findings together with its recommendations to the Clemson College Board of Trustees. This Board makes a recommendation to the State Board of Education based upon the result of the examinations and the findings of the State Board of Public Welfare. The State Board of Education makes the final awards and hears appeals, as provided by law.

7. The applicant is tested by competitive examinations in agriculture, English, and mathematics.

8. The college has a right to reject any applicant who in respect to age (16 years at the time of entering), examinations, or in any other respect, fails to meet its requirements for admission.

9. The following are not eligible for scholarship appointments:

- (a) A person who during the current year has won or holds a scholarship at another State institution.
- (b) A person who has been in attendance at Clemson College or "any other institution of higher learning known as a college or university,"—however this condition shall not apply if there are no other eligible candidates for the scholarship.
- (c) A person who has forfeited a scholarship at Clemson College or any other State institution by failure to maintain himself.

- (d) A person, except the son of a minister of the gospel, who has not resided at least six months in the county in which he is applying for a scholarship.

10. No applicant shall be debarred from standing the examinations because he has failed to fill out the necessary certificate of financial inability as required by law. However, this certificate must be in the hands of the Registrar of Clemson College before the applicant can be considered eligible for a scholarship. (The blank certificate form can be obtained at any time from the Registrar of Clemson College, or from the County Superintendent of Education on the day of the examinations.) It must reach the Registrar not later than noon of July 11, otherwise the applicant will be eliminated from the competition.

11. If a scholarship vacancy shall occur, and the county to which it belongs has no eligible applicant, the Clemson faculty may fill the vacancy by awarding the scholarship to some legally eligible applicant from another county. However, any such appointment shall not last longer than the current session.

12. No recommendations for scholarship awards to alternates will be made later than 30 days after the opening of the session.

The one hundred and seventy four-year scholarships provided in this institution by the Legislature are apportioned to the counties of the State according to law as follows:

Abbeville	3	Greenwood	4
Aiken	4	Hampton	2
Allendale	2	Horry	3
Anderson	7	Jasper	2
Bamberg	3	Kershaw	3
Barnwell	3	Lancaster	3
Beaufort	3	Laurens	4
Berkeley	3	Lee	3
Calhoun	2	Lexington	4
Charleston	9	Marion	3
Cherokee	3	Marlboro	4
Chester	3	McCormick	2
Chesterfield	3	Newberry	4
Clarendon	4	Oconee	3
Colleton	3	Orangeburg	6
Darlington	4	Pickens	3
Dillon	3	Richland	6
Dorchester	2	Saluda	3
Edgefield	3	Spartanburg	8
Fairfield	3	Sumter	4
Florence	4	Union	3
Georgetown	3	Williamsburg	4
Greenville	7	York	5

Note.—Scholarship students are credited at the beginning of each quarter with one-fourth of the value of the scholarship (\$25.00). See fees and expenses for full information.

TWO-YEAR AGRICULTURAL SCHOLARSHIPS

The holders of these scholarships are required to take the Two-year Agricultural Course described elsewhere in this catalog.

No financial certificate is required of applicants for these scholarships. The Act defining them is as follows:

"Sec. 1. Beneficiary Scholarships for Clemson.—There are hereby established and created fifty-one beneficiary agricultural scholarships in the Clemson Agricultural College of South Carolina, said scholarships to be of the value of one hundred dollars (100) per annum, and free tuition, and to be awarded so that there shall be one scholarship to each county, and seven scholarships from the State at large."

"Sec. 2. To Whom Open—Examinations.—The said scholarships shall be open to any young man a native of South Carolina, eighteen (18) years old or over, who has spent not less than three (3) years in the active practice of farming, consideration being given to the need and worth of the applicant, and to his agricultural knowledge as shown by suitable examinations. All applicants shall stand such examination as shall be prescribed by the proper authorities of the Clemson Agricultural College, and these examinations shall be held at the same time and in accordance with the general laws governing the examinations for other scholarship students."

"Sec. 3. Board of Education to Appoint.—The faculty of the said Clemson Agricultural College, or committee designated by the Board of Trustees for the purpose, shall recommend to the State Board of Education for appointment to the scholarships one of the young men who has successfully passed the examination and is otherwise qualified."

"Sec. 4. How Scholarships To Be Paid For—Term of Scholarships.—The said scholarships shall be paid from the income of the said Clemson Agricultural College as now provided by law, and each shall continue for a term not exceeding two years, or for such length of time as the beneficiary shall be able to maintain himself as a student of the college, and the said sum of one hundred dollars (100) per annum shall be placed to the credit of each beneficiary and applied to the payment of his board and other necessary expenses."

STUDENT HELPS

There is little opportunity at Clemson for a cadet to pay any large part of his expenses by working. There are few jobs that

he can get, and his time is so fully taken up by college work that little remains except that which should be used in recreation and in participation in student activities. A substantial part of a college education lies outside the curriculum. If a student must labor every spare hour to pay his way, he not only dissipates his energy in non-educational effort, but he misses some of the choicest privileges of college life. He misses the chance to read in the library, to write for the college publications, to prepare for the literary society work, to engage in athletics and the many other items that go to make up college life at its fullest.

It is a much better investment for a student to borrow the small amount of money necessary to pay his way at Clemson than for him to take up all his spare time in non-educational effort.

Scholarships and membership in the R. O. T. C. are available sources of help to pay a cadet's way through Clemson. There are also several loan funds available under certain conditions to needy boys.

In the line of work that does not interfere with classes or recreation are about forty positions as waiters in the mess hall. These positions require only about fifteen minutes before each meal and pay \$8.00 per month—about half the cost of board.

These positions are filled for the session 1927-1928 at the time the catalog goes to press.

LOAN FUNDS

The Harmon Foundation

The Harmon Foundation of 140 Nassau Street, New York City, has appropriated \$1,000.00 as a loan fund to assist worthy students for the session 1923-24, with the understanding that a similar appropriation will be made for the sessions 1924-25, 1925-1926, 1926-1927, and 1927-28. Only juniors and seniors studying in a course leading to a degree, are beneficiaries of this fund, and only those students whose means of support are dependent in whole or in part on their own labor are considered. A maximum loan in any one year is \$250.00.

The students sign installment contracts bearing interest at the rate of six per cent, payable at the rate of not less than ten dollars monthly, payments to begin one year after graduation. Contracts will be discounted at the rate of six per cent of the principal, if principal and interest are repaid within one year after graduation.

To insure the fund against losses, each borrowing student makes his contract for the amount of money borrowed plus a

premium of 10 per cent. He thus becomes responsible to this extent for the defaults in the payments of loans made to other students in his own college group receiving loans the same year. The premium is not used to augment the funds of the Foundation, and is not used for administrative expense. If there are losses, the losses will be deducted from the premium collected and the balance of the premium with 6 per cent will be returned to the borrowers in proportion to the amount of money loaned and repaid.

If there are no losses in the group-operation the entire premium collected will be returned with interest.

William Wilson Finley Foundation of the Southern Railway.

The sum of \$1,000.00 has been deposited with the college to be used as a loan fund and is available for young men living in counties traversed by the Southern Railway or the Blue Ridge Railway. The following conditions govern the use of the fund:

(a) That no help be extended to a student during his first year in college.

(b) That after he has been in college for one year, and during that time demonstrated not only his need, but his worth in character, studiousness and promise, the President of the college may at any time during the session loan to such needy student a sum not to exceed seventy-five dollars in any one session, provided the beneficiary is pursuing a regular agricultural course (two-year or four-year course), is a resident of a county traversed by the Southern Railway, or the Blue Ridge Railway, and does not hold a scholarship of any kind.

(c) That the student receiving this financial assistance shall give his note bearing 6 per cent. interest, payable one, two, or three years after completion of course. The loans of the first year shall be payable within one year after completion of the course, and any second and third loans shall be payable two and three years respectively after date of normal completion of the course.

At the discretion of the President the student may be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian.

(d) The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees and to the President of the Southern Railway, giving full details as to the use and status of the fund.

(e) Not more than one-fourth of the Fund shall be loaned in any one fiscal year.

George Cherry Foundation

Mrs. Mary Cherry Doyle of Oconee County has donated the sum of \$1,000.00 to be used as a loan fund to worthy and needy students from Oconee and the part of Anderson County including

Pendleton. The purpose of the fund is to commemorate her father, the late George Cherry, whose old home is near the college.

The following conditions govern the use of this fund:

1. That after a student has been in college for one semester, and during that time demonstrated his character, studiousness and promise, as well as his need for help, the President of the college may at any time thereafter during the session, lend to such student a sum not to exceed \$100.00 during any one session; provided, that loans shall be made only to students who are pursuing regular two year or four year courses, and who are residents of Oconee County, or of the territory within a radius of five miles of Pendleton Court-house, and who do not hold other scholarships of any kind.

2. That the student receiving this financial assistance shall give his note bearing 6 per cent interest, payable one, two or three years after completion of course. The loans of the first year shall be payable within one year after completion of the course, and any second, third and fourth loans shall be payable two, three or four years respectively after date of normal completion of the course.

At the discretion of the President, the student may be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian.

3. The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees, giving full details as to the use and status of the fund, and this shall be published in the Oconee papers.

4. Not more than one-fifth of the fund shall be loaned in any one fiscal year.

Conditions Governing The Use of the \$500.00 U. D. C. Fund.

John C. Calhoun Chapter

a. That no help be extended to a student during his first year in college.

b. That after he has been in college for one year, and during that time has demonstrated not only his need, but his worth in character, studiousness and promise, the President of the college may at any time during the session lend to such needy student a sum not to exceed one hundred dollars in any one session, provided the beneficiary is a lineal descendant of a confederate veteran, and a member of the junior or senior class.

c. That the student receiving this financial assistance shall give his note bearing 6 per cent interest, payable one or two years after the completion of the course. The loan of the first year shall be payable within one year after the completion of the course, and any second loan shall be payable two years after date of normal completion of the course.

The student obtaining a loan from this fund shall be required to furnish at least one endorsement from a financially responsible party, who may be the student's parent or guardian; provided such endorser shall be passed upon by a bank cashier.

d. The President shall at the close of each fiscal year, June 30, make a statement to the Clemson College Board of Trustees and to the President of the John C. Calhoun Chapter U. D. C. giving full details as to the use and status of the fund.

e. Not more than one-fourth of the fund shall be loaned in any one fiscal year.

PART III.—STUDENT LIFE AND ACTIVITIES

LIVING CONDITIONS

At Clemson students live in barracks under military discipline. The college is located away from the distractions of city life while at the same time it possesses many of its advantages. A student must at all times be present or accounted for.

The three barracks which house the students are steam heated and electrically lighted from the central power station located in rear of Barracks No. 2. Each building is provided with ample toilet facilities. In addition to the hot and cold water supplied to each of the barracks, running spring water is pumped to each floor for drinking.

The barracks or dormitories are divided into "halls" for military purposes, a unit being assigned to a hall under the supervision of a cadet officer. At night a cadet guard is maintained to insure order during study hour at which time the students are required to remain in barracks.

Cadet officers remain on duty in the guard room both day and night. A long distance telephone with twenty-four hour service is located in the guard room.

Each student room is equipped with necessary furniture. The beds are single width. Bed linen, bed covers, pillows and towels must be furnished by the student.

The dining hall or mess hall is located in Barracks No. 1 and is under the supervision of the mess officer. The mess hall is well equipped with silverware, china, glassware, table linen, etc. The kitchen and cold storage plant is one of the very best in the South. All students living in the barracks eat in the mess hall.

RESERVE OFFICERS' TRAINING CORPS

Under the provisions of the National Defense Act of June 3rd, 1916, the War Department has established at Clemson College an Infantry unit of the Reserve Officers' Training Corps (R. O. T. C.)

The purpose of the R. O. T. C. is set forth in Special Regulations 44, War Department, 1919, as follows:

1. The Reserve Officers' Training Corps is organized under authority of act of Congress of June 3, 1916, as amended by acts of Congress of September 8, 1916, and July 9, 1918. Extracts from these acts are contained in Appendix I.

2. The primary object of the Reserve Officers' Training Corps is to provide systematic military training at civil educational institutions for the purpose of qualifying selected students of such institutions as reserve officers in the military forces of the United

States. It is intended to attain this object during the time that students are pursuing their general or professional studies with the least practicable interference with their civil careers, by employing methods designed to fit men, physically, mentally and morally, for pursuits of peace as well as pursuits of war. It is believed that such military training will aid greatly in the development of better citizens. It should be the aim of educational institutions to maintain one or more units of the Reserve Officers' Training Corps in order that in time of National emergency there may be instantly available a large number of educated men, physically efficient and trained in the fundamentals of military science and tactics and fitted to lead intelligently the units of the armies upon which the safety of the country will depend. The extent to which this object is accomplished will be the measure of the success of the Reserve Officers' Training Corps.

3. The Reserve Officers' Training Corps will enrich the educational resources of schools and colleges by contributing new problems, applications and equipment. This will not only vitalize the course of study but give to the student a training which will be as valuable to him in his individual or professional career as it would be, should the Nation call upon him to act as a leader in its defensive forces.

Moreover, the wide variety of work recognized and accepted by the War Department as of intrinsic value for military purposes should leave on the mind of the student an indelible impression of the extent to which the modern Army is the nation in arms. Commerce, industry, agriculture and all the professions have each their contribution to make to the military organization.

4. A military unit is largely dependent for its efficiency upon the physical fitness of the individuals composing it. Physical training, therefore, will form an essential part of the military instruction. It will be the policy to encourage and support the physical training given by civilian teachers, thus cooperating with all other effective agencies in an effort to promote a more vigorous American manhood.

5. a. The policy adopted by the War Department to carry out the provisions of the act of Congress of June 3, 1916, is a matter of vital importance to every citizen interested in the educational system of our country and the development of American youth. It will aim to give all students of the Reserve Officers' Training Corps a thorough physical training, to inculcate in them a respect for all lawful authority, to teach the fundamentals of the military profession, leadership, and the special knowledge required to enable them to serve efficiently in the various branches of the military service.

b. The War Department aims to establish in selected civil educational institutions a system of training which will tend towards making better citizens and furnish a means whereby the graduates of such institutions can function more advantageously to the best interests of the nation in time of military necessity.

Requirements. All students at the college are required to take a minimum of three hours per week of military training. Members of the freshman and sophomore classes who are more than 16 years of age and who pass the physical examination

must take the Basic Course as laid down by the War Department, and set forth under the heading "Military Department" in the detailed description of the course.

A junior and senior student may continue in the Basic Course or by conforming to the following rules may enter the Advanced Course:

1. He must have completed the Basic Course.
2. He must be recommended by the President of the college and the Professor of Military Science and Tactics.
3. He must agree in writing to continue the course during the remainder of his time in college, devoting not less than five hours per week to the subject, and to attend the one summer camp prescribed by the War Department.

Students taking the Basic Course in their freshman and sophomore years are furnished one uniform each year, or commutation at a rate prescribed by the War Department. Members of the upper classes continuing in the Basic Course are not considered members of the R. O. T. C. and are not entitled to the uniform or commutation therefor. Freshmen or sophomores and special or short course students who are not physically qualified for the R. O. T. C. and members of these classes who for other reason do not enter the R. O. T. C. are not entitled to uniform or commutation thereof.

At present rates the government commutation for uniforms next session would be \$6.00 for the session. These figures cannot be guaranteed as they are fixed each session by the War Department.

Those taking the Advanced Course are entitled to this uniform or commutation therefor, and in addition, to an allowance for subsistence, (thirty cents per day at present), during the remainder of their course at college including the vacation between their junior and senior years. During the time in camp they are given the ration instead of commutation for subsistence, and at present are paid seventy cents per day.

Summer Camps. As noted above under head of "Requirements", every one taking the Advanced Course must take, under army supervision and at government expense, one period of camp training of about six weeks duration.

Transportation to and from the camps, pay at the rate of \$21.00 per month and subsistence while in attendance, and a uniform for camp use will be furnished.

Obligations. The only obligation incurred by the student taking the Basic Course is to take proper care of the uniform issued to him.

No obligations are imposed on those in the Advanced Course

except as set forth in the contract and noted above, namely—

(a) To continue in it to completion unless sooner discharged by competent authorities.

(b) To attend one summer camp.

After Graduation—Commission in O. R. C. After completion of the college course and attending the period of camp training the student is released from any further service under his contract with the United States. But if he so desires, and is recommended by his instructors, he may apply for a commission in the Officers' Reserve Corps (O. R. C.) These commissions are issued for periods of five years. If his application is approved and the President of the United States will commission him, he may be required to report for instruction for a period not to exceed fifteen days in any one year, at government expense, and under the salary of his grade. During this period of five years he may be called into active service only in case of actual or threatened hostilities, and then with the rank he holds in the Reserve,—Second Lieutenant or higher.

Appointment as Temporary Second Lieutenant in Regular Army

Upon application, the President of the United States is authorized to appoint any reserve officer as a temporary second lieutenant in the U. S. Army, and assign him to duty with the army for a period of six months. During this service he will receive \$100 per month salary and the allowances of a second lieutenant. At the end of the period of instruction he reverts to his status as a reserve officer.

Under the provisions of the National Defense Act of 1920 five per cent of the graduates of any college rated by the War Department annual inspection as a "Distinguished College" (which has been awarded the college since 1923) may be appointed a second lieutenant of the regular army on an equal basis with the graduates of the United States Military Academy at West Point.

CARE OF THE SICK

The Surgeon is one of the regular officers of the college, and his special duty is to look after the health of the students. He also has charge of the hospital, and supervises all matters pertaining to the sanitation of barracks.

At a regular appointed time every day, students who so desire may consult the Surgeon, and those who are sick are cared for by experienced nurses in the college hospital. In case of necessity students are allowed to consult the Surgeon at any time, or send for him, as may be required.

The material facilities for the hospital have been improved recently. An X-ray machine has been installed which is a very valuable asset.

The College Surgeon who has charge of the sick is assisted by a registered nurse and an X-ray and laboratory technician.

The Surgeon cannot undertake to notify parents every time a student reports to the hospital for medicine, or for rest on account of some slight complaint. However, they may rest assured that they will be promptly notified of sickness of any consequence. In case of serious illness the Surgeon will telegraph them.

RELIGIOUS INFLUENCES

Clemson co-operates to the fullest extent with the various churches and the Y. M. C. A. in the religious training of its students.

Four denominations, Baptist, Episcopal, Methodist, and Presbyterian, have erected churches in the community. The college contributes liberally to the salaries of the resident ministers who do pastoral work among the students. All Protestant students are required to attend the Sunday morning services at one of the churches. Services for students of Roman Catholic faith are held frequently by a priest from one of the nearby towns.

Devotional services are held regularly in chapel. The college pastors and visiting ministers conduct these exercises.

Sunday Schools and young peoples church societies are maintained by the local churches. Attendance upon these services is voluntary.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION

The Young Men's Christian Association is housed in its own building. The "Y" has become the chief social gathering place and is the center of voluntary religious activity. During the current session approximately 600 students have been enrolled in voluntary Bible Study Classes. Two trained secretaries are employed by the Association.

The Young Men's Christian Association has supervision of the voluntary religious activities of the students and endeavors to serve the religious, social and physical life of the college community in keeping with the general policies of the international organization. It is a democratic student organization, advised by a Board of faculty and business men. The General Secretary is elected by this Board and he, with the advice and consent of the Board selects an Assistant Secretary. The secretaries have no official connection with the college as disciplinarians or instructors.

The officers are elected annually by the active members. The President has the appointive power and selects a Chairman for each Committee. The Chairman of each Committee then selects his committeemen. These chairmen constitute the Cabinet and meet regularly each week for consultation and reports. The work is divided into Bible Study, Mission Study, Community Service, Membership Conferences, Socials, Religious Meetings, Church Relationships, Evening Watch, Gospel Teams, and Boys Work.

Opportunity is afforded each man to enroll in one of the Voluntary Bible Classes. These classes are led by students members of the Faculty and ministers of the different churches.

The Sunday night union service is held at the Y. M. C. A. and has been attended by approximately four hundred each night. Local and visiting speakers speak at these services.

Numerous speakers of State-wide and national importance are brought to Clemson through the efforts of the Y. M. C. A. Dr. F. N. Seerley, Orin R. McGill, of China, B. A. Schnell, T. B. Lanham, Andy T. Roy, and other splendid speakers including Dr. Sikes, Rev. Hodges, Rev. Crouch, Rev. Satterlee, Rev. John McSween, Prof. Poole, and delegations from other colleges in the State.

The Y. M. C. A. is the meeting place for friends and parents of students and is the general community building of Clemson.

ATHLETICS

It is the policy of the college to sanction and encourage athletics so long as it does not interfere with studies and other duties. Football, baseball, basketball, and track are the most popular sports, and it is assumed that parents are willing for their sons to participate in these games unless the President is definitely notified to the contrary. The athletic teams are permitted to take a few trips each season, usually on Saturday, to play intercollegiate games. The college is a member of the Southern Intercollegiate Conference (S. I. C.) and of the South Carolina Intercollegiate Athletic Association (S. C. I. A. A.).

Intercollegiate Athletics.—For the regulation of intercollegiate athletics, the Faculty has adopted the following rules:

1. No student who has a class mark lower than passing in more than eight hours of work in any one semester shall be allowed during the ensuing semester to take part in any intercollegiate contest. Changing from one course to another shall not interfere with the operation of this rule.

At the end of each grading period, the Faculty Athletic Committee will canvass the record of athletes, and if any are found to be so deficient as to endanger their scholastic standing, they will be withdrawn from the squad.

2. Absences from College.—The football team shall be allowed a maximum of ten days absence from the campus during the session for games away from the college. The baseball team shall be allowed a maximum of ten days; the band shall be allowed a maximum of ten days; the track team and the basketball team ten days. The tennis team, glee club, or any other organization hereafter sanctioned, shall be allowed a maximum of ten days absence during each session. Saturday afternoon, Sunday, and holidays shall not count as days. No one contestant or representative shall be allowed to leave the campus for more than twenty days during the session, except at the discretion of the Faculty Athletic Committee.

3. No member of an athletic team shall be eligible for a managerial position in any other branch of sport.

4. No team shall be allowed to leave the college grounds to participate in any match games unless accompanied by a member of the Faculty, who shall be responsible to the Faculty for the conduct of the players and coaches while away from the college. Such representative shall be appointed by the chairman of the Faculty Athletic Committee, and his expenses shall be included in the expenses of the trip, provided that when any team, except the football team, leaves the college grounds, the chairman, at his discretion, may appoint a player or a manager in place of a member of the Faculty.

5. No student shall be eligible to participate in an intercollegiate contest who is away from the college without proper authority, or without having complied with all the rules or orders issued by the Commandant regarding such matters.

6. It shall be the duty of the Faculty Athletic Committee to see that the foregoing rules and regulations are strictly enforced.

LYCEUM COURSE

A Lyceum Course, comprising about six numbers and employing some of the best talent on the American platform, is offered as a means of entertainment to students and others.

AGRICULTURAL SOCIETIES

Dairy Club

This is a student organization composed of juniors and seniors who are taking dairying. The object of this club is to promote interest in the dairy industry and to provide experience for students in leading discussions on various topics of interest in their chosen field. Members of the faculty of this division assist the students in carrying out these objectives.

Horticultural Club

The students who are interested in coming together for a study and discussion of the various phases of the horticultural field—vegetable gardening, truck farming, landscaping, and horticultural inspection work—have an opportunity to do this with the cooperation of the instructional staff of the Horticultural Division in this organization.

Entomology and Zoology Club

The study of the sciences of entomology and zoology has stimulated interest to the extent that the students have organized a club which affords opportunity for experience in leading discussions and making reports of a scientific nature. This work is fostered by the faculty of this division.

ARCHITECTURAL SOCIETY

Students in architecture have formed an organization for the purpose of bringing them in contact with certain phases of that profession which are not given in the ordinary experience in class work. Occasionally prominent architects from near by cities are invited to lead discussions.

THE BAND

Clemson College has been noted for its excellent musical organizations, of which the band is the oldest. This organization occupies one section in barracks which affords opportunity for close contact with its members.

Each year the band is invited to many places in the State to give entertainments. The experience that a student has during his four years in college as a member of this organization is very valuable.

CHEMISTRY SCIENCE CLUB

This is a voluntary student organization the purpose of which is to keep in touch with current scientific literature and to provide an opportunity for leading discussions and giving scientific papers on topics of interest.

Agricultural students who major in chemistry as well as students who are candidates for the Bachelor of Science degree in chemistry are eligible to membership in this society. The chemistry faculty cooperates to the fullest in making this organization of real value.

DRAMATIC CLUB

There has been considerable interest aroused in dramatics among the student body. This interest has found expression through the work of the Dramatic Club. During the present year several entertainments have been given at the college and elsewhere. This work is under the direction of faculty members who are especially interested in dramatics.

CLEMSON COLLEGE BRANCH OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

This organization is composed of instructors and students belonging to this national institution. This branch is maintained with the aim of acquainting the students with current engineering practice and problems.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

A local branch of this national society, composed of faculty members and of students pursuing mechanical engineering, is established at the college. Meetings are held periodically for the discussion of the latest engineering practices.

AMERICAN SOCIETY OF CIVIL ENGINEERS

Membership in this is limited to civil engineering students as follows: All seniors in good standing; the seven juniors having the highest class standing; and the one sophomore having the highest class standing.

Regular meetings are held monthly, and at such other times as exigencies favor. At these meetings engineering practice is presented and discussed; speakers from outside the college being obtained as often as practicable.

THE SABRE CLUB

The Sabre Club, a local honorary military society sanctioned by the college authorities, which has been active along military lines and instrumental in making better officers, was organized at camp last summer by the five cadet field officers appointed prior to that time.

The purpose of the Sabre Club is to unite in closer relationship the officers of the corps, to preserve and develop the essential qualities of good and efficient officers, to prepare cadets as educated men to take a more active part and have greater influence in military affairs in their communities, and above all to spread intelligent information concerning the military requirements of our country.

organization makes for Americanism. In time it is expected to be made a chapter of the National Society of Scabbard blade.

TEXTILE SOCIETY

Students of the textile courses have organized a society for a study of this industry in South Carolina. Noted textile leaders are invited to address this organization. Members of the textile industry cooperate with the students in carrying out their projects.

THE GLEE CLUB

The glee club ranks very high among similar organizations of the state, and has won second place at the State Contest several times in succession. The club is conducted by a student manager, and under his leadership has reached a very high plane in song, chorus work and general performance. The trips taken by the glee club are the most extended of any of the college organizations, and include many points outside the state.

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LITERARY SOCIETIES

Three literary societies, the Calhoun, the Columbian, the Palmetto, furnish a valuable supplement to the work of the college. These societies afford facilities for practice in debate, oratory, declamation, and essay writing, and their members acquire a valuable knowledge of parliamentary law and usage. The meetings are held weekly, on Friday evenings.

On these occasions a representative is chosen from each society to enter the contest for the Trustees' Medal at Commencement.

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The societies themselves also award medals annually to the best debater, orator, and declaimer.

The societies occupy halls in the administration building, and are furnished with carpets and opera chairs and which are maintained entirely by the students. A small initiation fee is charged, and small yearly dues are collected to meet running expenses. All students are advised to join one of these societies. The societies also send a representative to the annual contests of the South Carolina Intercollegiate Oratorical Association, which includes the following institutions: Furman University, Wofford College, Clemson Agricultural College, Presbyterian College of South Carolina, Erskine College, Newberry College, South Carolina Military Academy, and the University of South Carolina.

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THE CONCERT ORCHESTRA

This organization is affiliated with the State Federation of Music Clubs, and is the most democratic of any of the other groups. Officers are elected yearly, and consist of a President, Vice-President, Business Manager, and Librarian. The object of the organization is presented in the following extract from the constitution:

"In order to cultivate a taste for orchestral music and its value, to improve ourselves in ensemble playing, and to furnish music of a standard character for those who order as well as to derive pleasure ourselves, we hereby organize the Clemson Concert Orchestra."

STUDENT PUBLICATIONS

The **Clemson College Chronicle**, a monthly magazine devoted to encourage literary work among the students, is published jointly by the literary societies during the college session.

The **Tiger**, published weekly is devoted largely to athletic alumni and local news.

The **Annual**, an illustrated volume, is published under the auspices of the senior class.

PART IV.—ORGANIZATION AND GOVERNMENT

ORGANIZATION OF THE COLLEGE

By Departments and Divisions

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| <p>1. Agricultural Department</p> <p>Agricultural Economics
Agronomy
Animal Husbandry
Botany and Bacteriology
Dairying
Education
Geology and Mineralogy
Horticulture
Poultry
Rural Sociology
Veterinary Science
Zoology and Entomology</p> <p>2. Arts and Science Department.</p> <p>Economics and Sociology
English
History
Mathematics
Modern Language
Physics</p> <p>3. Chemical Department</p> <p>Chemistry
Chemical Analysis (Public State Work)</p> <p>4. Engineering Department</p> <p>Architecture and Drawing
Civil Engineering
Electrical Engineering
Forge and Foundry
Mechanical Engineering
Machine Shop
Wood Shop</p> | <p>5. Military Department</p> <p>Military Instruction
Military Discipline</p> <p>6. Physical Education</p> <p>Corrective Gymnastics
Intramural Athletics
Intercollegiate Athletics</p> <p>7. Textile Department</p> <p>Carding and Spinning
Industrial Education
Textile Chemistry and Dyeing
Textile Research
Textile Testing
Weaving and Designing</p> <p>8. Student Affairs</p> <p>Cadet Funds
Student Activities</p> <p>9. Miscellaneous</p> <p>Business Manager's Office
Construction and Repairs
Heat, Light, and Water
Hospital
Library
President's Office
Registrar's Office
Roads and Campus
Treasurer's Office</p> |
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COLLEGE ORGANIZATION AND GOVERNMENT

Board of Trustees.—The government of the college is vested in a Board of thirteen members, six of whom are elected by the Legislature and seven life and self perpetuating under the Clemson

will. The function of this Board is legislative and not executive. The Board determines the general policy of the college, makes the laws for its government, and directs the expenditure of its funds.

The President is the chief executive and administrative officer of the Board of Trustees. He is the head of the college and is responsible for its satisfactory working and success.

The college is divided into seven departments, namely, Agricultural, Engineering Arts and Science, Chemical, Textile, Military, and Student Affairs. A director is at the head of each department and is responsible to the President for its conduct and success. The departments comprise the various divisions indicated on the preceding page. Each division is in charge of a professor who acts as chief of the division. The President conducts all official business with each department through its director.

The Faculty consists of all officers of instruction in the college. The voting members are the Directors, Professors, Associate Professors, and Assistant Professors.

The faculty meets at least once a month, or whenever called by the President, and is an advisory body to the President, on the instructional work of the college and on such other business as he may bring before it.

Faculty Committees. In order to aid him in his executive duties and to carry on the instructional work of the college, the President appoints committees from the faculty. To these are assigned certain specified lines of work and the committees are clothed with full authority.

Student Activities. The Department of Student Affairs embraces all those interests supported by the cadets, and all student activities except the Y. M. C. A. It is the aim of the college to assist in every possible way in making these interests helpful to the student body as a whole. The Director of Student Affairs is in charge of all such activities.

The Discipline Committee.—The Discipline Committee is composed of six directors of departments and two full professors elected annually by the Board of Trustees. This committee constitutes the court of the college and tries cadets charged with serious offenses under the regulations. The President is the reviewing authority of the Discipline Committee, and may at his discretion set aside or modify the sentences imposed. A parent, or a cadet over age, has the right to appeal from the sentence of

the Discipline Committee to the Board of Trustees, provided the appeal is lodged with the President of the college within thirty days. This appeal must be forwarded to the President of the Board of Trustees, who if he deems the appeal meritorious, shall present it at the next regular or called meeting of the Board.

All trials by the Discipline Committee are open to the public, and all testimony is taken under oath and recorded stenographically as in a civil court. A student on trial may have some member of the faculty to assist him in his defense if he so desires.

CADET MILITARY ORGANIZATION AND GOVERNMENT

Clemson College is operated as a military school,—not for the purpose of making soldiers, but in order that the students may learn important life-lessons of obedience to authority, punctuality, system, courtesy and loyalty. The military system insures proper exercise and physical development, guarantees to the parent that the student shall at all times be present at the college, or away by proper authority, insures attendance upon classes and other duties, and insures proper provision for study as well as for recreation.

The military system places every student on the same basis. All students must dress alike, live under the same conditions, and be subject to the same privileges and the same restraints. No distinction whatever is made because of wealth or social position or any other such consideration. The only distinguished men in a cadet corps are those who achieve the distinction by being able to do some one thing better than their fellow students.

The military system does not in any way interfere with the regular college work, and on the other hand enables this to be carried on at the highest efficiency. It is the military training more than any other single feature that gives to Clemson's graduates an advantage which is an important factor in their future progress and success.

The President.—The President of the college shall have the general command and government of the institution, watching over its administration, discipline and instruction. He shall have authority to make rules, from time to time, governing the granting of permits and furloughs to cadets; to inspect anything in a cadet's room or personal baggage; to suspend or modify these regulations, or to publish special regulations when he considers it necessary, which shall have the authority of the Board of Trustees until they shall act on the same. He shall prescribe the hours of study, drill and recreation.

Commandant.—The Commandant of Cadets, under the President, has supervision of the Corps of Cadets in all that pertains to its organization, drill, discipline and administration. He shall prescribe the order in which the furniture, bedding, books, clothing, equipment, etc., shall be arranged throughout the barracks and shall make a thorough inspection of the rooms, furniture, arms, equipment and uniforms of the cadets at least once each week. He shall have the right to inspect anything in a cadet's room or personal baggage. He shall perform such other duties as are prescribed in these regulations. He shall have the rank of Colonel.

Assistant Commandants.—The Assistant Commandants shall perform such duties as may be prescribed for them by the President or Commandant.

Military Instruction.—All students, excepting such students as are excused by the President, must take a minimum of three hours military instruction per week. All who pass the required physical examination must take the Basic Course prescribed by the War Department for the R. O. T. C. during their freshman and sophomore years.

Members of the junior and senior classes are selected by the Professor of Military Science and Tactics, subject to the approval of the President, to take the Advanced Course prescribed for the R. O. T. C., receiving certain financial benefits allowed by the Federal Government.

Cadet Officers and Non-commissioned Officers.—The cadet officers and non-commissioned officers are appointed by the Commandant, subject to the approval of the President. When practicable they shall be appointed from members of the R. O. T. C. who have been most studious and soldier-like in the performance of their duties and most exemplary in their conduct. No cadet may decline any office to which he may be appointed.

As a rule the officers shall be appointed from the senior class, the non-commissioned officers, except corporals, from the junior class, and the corporals from the sophomore class.

Study Hours.—Study hours are those parts of the day which are designated for study and shall be prescribed in orders. All hours from 8 A. M. to 4 P. M. at which a student has no classes or other duties are designated as study hours and students are expected to use this time as well as the study period after supper for study.

Chapel and Church.—All students are required to attend Chapel Services. All students except Catholics and Jews are required to attend Divine Services at one of the local churches on Sunday mornings.

Furloughs and Passes.—Any cadet who has been granted a furlough or pass and who stays over the time stipulated unless for sickness or other good and valid reasons acceptable to the Commandant, will lose his place in the college, and will be required to file a new application for admission, and pay a fee of \$5.00 before being allowed to rematriculate. In case he has been sick a certificate from the attending physician must be submitted, and no such certificates will be accepted unless the President or Commandant has been notified in advance of the date the cadet is due to return.

The Commandant may, at his discretion, in lieu of rematriculation and payment of fee, punish the cadet by arrest, etc., according to the nature of his offense, the punishment not to exceed one month's arrest and 20 demerits. All cadets returning late on furlough or pass are placed in room arrest pending an investigation of the reason or their late return.

All communications from parents requesting furloughs for their sons must be addressed or sent directly to "The Commandant" or to "The President", and must set forth fully the reason for the request. No furloughs will be granted unless the reasons given are considered satisfactory and sufficient justification for any loss of time for absence from classes or other duties. Telegrams which do not explain fully will not be accepted as complying with the above rules. In any case in which business is given as a reason, the nature of the business must be explained fully.

A parent has the right to demand a discharge from college at any time and for any reason but the college authorities reserve the right to grant or refuse to grant furloughs.

Week-End Leaves.—Week-end leaves will be granted under conditions prescribed by the President.

Demerits.—Demerits are awarded for every unremoved report, the number depending on the nature and degree of the offense. Any regular cadet receiving 65 demerits, or any day cadet receiving 50 demerits, or any special student receiving 50 demerits, during any one semester shall be required to withdraw from college.

Discharge.—No cadet unless twenty-one years of age and paying his own way at college shall be discharged except on the written application of his parents or guardian addressed to the President or the Commandant, or for reasons satisfactory to the President.

Failure to Pay Dues.—The President may require a cadet to withdraw from college if after due and reasonable notice his dues to the college are not paid.

Text Books.—Each student will be required to own his own text books and necessary equipment, except in the case of brothers in the same class who occupy the same room.

All cadets shall submit their text books and other equipment for inspection at such times as are ordered.

Day Cadets.—All cadets shall live in the barracks, except those who live with their parents or relatives near enough to attend from their homes, or have the permission of the President to live outside barracks. Those so living at home shall be known as "Day Cadets." All will be required to live in the barracks at least six months of the freshman or sophomore year as may be directed by the President. No cadet will be given a Bachelor's Degree unless he shall have lived at least two-thirds of one session in barracks. Day cadets are subject to the Cadet Regulations.

Motor Vehicles.—No cadet, day cadet, or special student, shall own or operate any automobile or motorcycle during the regular session of the college, except by special permission from the President.

PART V.—PUBLIC SERVICE

THE SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION*

The Agricultural Experiment Station of South Carolina is a department of Clemson College. The experiment station at present consists of the main station, which is located Clemson, and three sub-stations; one at Summerville, in the coastal plain region, one at Florence, in the Pee Dee section, and one at Pontiac, near Columbia, in the sand hill region. The main offices and laboratories of the station are located on the Clemson College campus, while the station experiment farm, consisting of about 200 acres, is east of and adjoining the college campus. The investigations dealing with the fundamental principles of agricultural sciences and with the application of such principles to practical agricultural operations are carried on in the laboratories and on the experiment station farm at Clemson. The experiments looking to the adaptation of such scientific data accumulated here and elsewhere to the conditions peculiar to certain sections of the State are carried on at the sub-stations and at branch laboratories established in certain sections of the State for this purpose.

It is the aim of the experiment station to conduct research work on problems which have a direct practical bearing on the agriculture of the State. With this end in view elaborate experiments relative to the best methods of procedure under various conditions with the principal plants and animals have been undertaken. As progress is made with such experiments the results obtained are given out to farmers in the form of bulletins, circulars and personal letters. Since the establishment of the station 234 such bulletins and 89 circulars have been published, covering practically all phases of agriculture.

Aside from the research work and the publication of results obtained from such research the experiment station performs various other duties. Among these might be mentioned the entomological and pathological inspection work which aims to protect the farms, orchards and gardens of the State against the introduction of injurious insects and diseases; the biological and soil survey of the State; and the cooperative experimental work carried on with hundreds of farmers in the State. The technically trained experts of the station staff are regarded as authorities in their several specialties and they are constantly giving out information relating to the various lines of agricultural endeavor. More than fourteen thousand personal and circular letters are written annually to residents

The Experiment Station staff is given on page 19.

of the State giving technical information to individuals on special subjects. The station staff also aids in disseminating agricultural knowledge by co-operating with the Extension Service of the college in holding agricultural meetings and conferences and by meeting with the farm demonstration agents and giving to them technical information which they in turn carry direct to the farmers.

Close cooperation is maintained with the various research bureaus of the National Department of Agriculture and with the departments of the college. The laboratories are always open to the inspection of the students and other people of the State. The same is true of the experiment station farm. There is always opportunity for a limited number of students to secure work in the various divisions of the station and to assist in the research work carried on by the members of the station staff.

A full report of the work and expenditures of the Experiment Station is published annually and this report and all other publications of the station are free and will be sent on request. Requests for these should be addressed to H. W. Barre, Director, Clemson College, S. C.

THE AGRICULTURAL EXTENSION SERVICE*

The agricultural extension work of the college is carried on by the Extension Service in co-operation with the United States Department of Agriculture. The work is supported by Federal appropriations and in part by State and County appropriations. The main development of extension work has come since the enactment of the Smith-Lever Act in 1914. The purpose of Extension work is to instruct farmers of the state in the practical application of the principles of improved agriculture in both production and marketing. A staff of specialists, some of whom are also members of the Agricultural Faculty, assist the county agents in planning and carrying out demonstrations with farmers over the state.

Publications.—A large number of publications, including bulletins, circulars, posters, and information cards are distributed annually. The Weekly News Notes is published to carry matters of timely and practical interest to the editors and a few farmers of the state. A free press plate service is also furnished to those papers requesting it. In addition to this, news letters are issued on an average of three times per week and these are sent only to the newspapers. Monthly letters or printed circulars on poultry, orchards, gardening, dairying and boys' club work are mailed free to those persons especially interested in these subjects.

The Extension staff is given on page 20.

County Agents.—Every county in the state, by co-operation in providing the finances, may have a county agent. These agents are agricultural college graduates who have had practical farm experience. They devote their time to instructing farmers through demonstrations, personal conferences, meetings, community organizations, publications and letters.

Home Economics Work.—This work is carried on under the immediate supervision of Winthrop College. It is, however, a part of the Extension work under the Smith-Lever Act, and as such is under the general direction of the Extension Service. Nearly every county is provided with one home demonstration agent in the same way that they are provided with county agents.

Negro Demonstration.—A few negro local agents are employed to work with the negro farmers of the state in sections where the negro population is great. These agents are employed in co-operation with the State College at Orangeburg, and the President of the State College acts as District Supervising Agent.

Live Stock.—Work in this project is carried on with the idea of promoting the live stock interest of the state along sound permanent lines. Those desiring to purchase purebred live stock can in most cases secure them within the state from breeders who have been assisted by the Extension Service, this was not true ten years ago. Live stock agents have also stimulated the growing of pastures and forage crops and have assisted in the feeding and marketing of cattle and the co-operative purchase of materials needed. There is a revival of interest in hogs and sheep and with low cotton prices these lines of live stock work will no doubt make greater demand for assistance on the Extension Service.

Dairying.—The Extension dairyman devote their time chiefly to development work such as bull associations, feed campaigns, dairy schools, advice regarding the construction of silos, barns, purchase of dairy cattle and the testing and improvement of herds.

Corn and Cotton Breeding.—Variety tests of corn and cotton are conducted in a dozen localities in the state along with demonstrations in the field selection of corn and cotton. Up to date this work has resulted in showing what varieties of corn and cotton are best adapted to different sections of the state, and farmers are generally planting those varieties. A number of communities are being given assistance in organizing for growing only one variety of cotton and one of corn. A cotton contest among farmers is conducted annually for the purpose of improving the

quality of staple and lowering the costs through larger yields per acre.

Orchards, Gardens and Potato Storage Houses.—Home orchards and gardens, commercial peach and apple orchards are the principal lines of work developed by the Extension horticulturists. The results obtained in the last few years along these lines are far reaching, and point the way for the proper utilization of some of our acres under present conditions.

Poultry Work.—The wisdom of increasing the size and quality of farm flocks is now being emphasized, together with efficiency in marketing poultry products. In 1926, 104 carloads of live poultry were shipped out. Many hatcheries are in operation and every phase of poultry production is being enlarged. A modern poultry plant at Clemson (given to the college by a friend interested in promoting agricultural welfare and readjustment) is about completed. This will be one of the best poultry plants in the cotton states and will serve as a place to work out poultry problems, as well as a demonstration to farmers and for teaching purposes.

Marketing.—Efforts are made to secure convenient and profitable marketing arrangements for the various crops of the state. The organization of co-operative marketing associations is encouraged. Proper grading and loading for shipment are stressed, particularly where farmers are just beginning to produce a new crop. Shipping point inspection has been provided for those who want it in cooperation with the Federal Bureau of Agricultural Economics for the protection of shippers of certain perishable crops. There is produced very little of surplus crops for which some outlet has not been found.

Entomology.—There are two principal lines of this work; first insect control work, and second, bee keeping work. One specialist is employed who gives his time to the insect work, instructing farmers as to the life history, habits, etc., of insects and control measures.

A specialist in bee keeping is employed to develop this industry. This state has great possibilities along this line.

Boys' Club Work and Short Course.—Boys' agricultural clubs are organized with the idea of enlisting the intelligent interest of the boys, and through them their parents, in improved methods of agriculture. To the winners of certain contests short courses are provided at the college during the summer months.

Organizations.—Whenever conditions are suitable for community organizations, these are encouraged and the full support of the Extension Service is lent towards making them successful.

LIVESTOCK SANITARY WORK*

The Clemson College Live Stock Sanitary Office is a department of Clemson College and is under the supervision of the Agricultural Committee of the Board of Trustees. This office is located in Columbia, S. C., in order that the best interests of the livestock industry may be served, and is in charge of the State Veterinarian, Dr. W. K. Lewis, who is also Director of this Department.

The principal functions of this office are: Tick Eradication, Tuberculosis Eradication and Hog Cholera Control. In addition to these, all reported outbreaks of contagious, infectious and communicable diseases of live stock are investigated, and measures recommended for the control and eradication of the specific condition; and quarantine is maintained against the introduction of diseased livestock into the State.

The Columbia office has recently established a fully equipped laboratory for bacteriological and pathological work, in order that proper and prompt diagnosis of certain diseases may be made. Parasitic research work will be conducted in various sections of the State in connection with the Columbia laboratory.

In addition to the force of veterinarians working out from the Columbia office, Assistant State Veterinarians are located at strategical points in the State so as to be readily available to the farmers in their respective territories.

On July 1, 1925, twenty-two (22) practicing veterinarians of the State were commissioned as Deputy State Veterinarians, to assist the State Veterinarian in the control and eradication of contagious and infectious diseases of livestock. The Deputy State Veterinarians are located principally in the northern and eastern sections of the State, and with the Assistant State Veterinarians located in the middle and southern sections of the State, the Clemson College Live Stock Sanitary Office is in position to render a service to the livestock industry of the State in keeping with its development and maintain the service to the highest degree of efficiency.

The Clemson College Live Stock Sanitary Office also maintains an equipment for handling large stocks of anti-hog cholera serum, virus and veterinary biologics and furnishes these products to the citizens of the State at cost, thereby effecting a saving to them of several thousands of dollars annually.

The live stock sanitary work is required by legislative enactment and is supported by legislative appropriations.

*The Livestock Sanitary Work staff is given on page 22.

The Bureau of Animal Industry, U. S. Department of Agriculture co-operates in Tick Eradication, Tuberculosis Eradication, and Hog Cholera Control, and duplicates the amounts appropriated by the State Legislature for these projects.

MISCELLANEOUS PUBLIC SERVICE

Fertilizer Inspection and Analysis.—The work of fertilizer inspection and analysis is under the supervision of the Board of Control consisting of ex-Governor Richard I Manning, chairman, J. E. Wannamaker of St. Matthews, and J. J. Evans, Bennettsville. The work of inspection is under the immediate supervision of H. M. Stackhouse, Secretary of the Board of Control.

There are inspectors to look after this feature of the work in different parts of the state.

The work of analysis is carried on in the Fertilizer Analysis Division of the Chemical Department and is under the supervision and direction of Dr. R. N. Brackett, Chief Chemist.

The work consists of the analysis of commercial fertilizers as provided for by the Fertilizer Law of the State. This Division also undertakes the analysis of waters, ores, minerals, and other naturally occurring materials, except soils (which are analyzed by the Experiment Station), portions of human bodies in cases of suspected poisoning, as provided for by law, and the analysis of home-mixed fertilizers. All the work of this Division is done free of charge.

Entomological and Pathological Inspection.—This work is carried on under the direction of the State Crop Pest Commission.

The State Entomologist is Prof. F. Sherman, head of the division of Entomology, and the State Pathologist is H. W. Barre, head of the division of Botany and Bacteriology.

The work of these officers consists of the control of contagious plant diseases and insect pests. The State Entomologist has also supervision of all nursery stock sold within the State.

A permit tag issued by the State Crop Pest Commission should be attached to every package of nursery stock, seed or plants offered for sale or shipment for planting purposes.

Agricultural and Textile Scholarships.—The college maintains 223 two year and four-year scholarships, in the textile and agricultural departments. Each scholarship is worth \$100 and free tuition. The cost of these scholarships is paid out of the fertilizer tax, as the State makes no appropriation therefor.

The annual cost of these scholarships, including advertising, expense of holding examinations, etc., is about \$20,000.00.

School Houses.—The college also furnishes free plans and specifications for rural school buildings to school trustees desiring to erect a new school house, and will advise and furnish drawings for alterations of old school houses. This work was undertaken at the request of and under the direction of the State Superintendent of Education. Further information and a copy of a bulletin on "Rural School Buildings" will be furnished by Rudolph E. Lee, college architect, upon request.

State Vocational Agricultural Judging Contest.—Clemson in cooperation with the State Department of Education conducts annually a contest for students of vocational agriculture. The nature of this contest is educational and many high school boys have an opportunity thereby of improving themselves in selecting better specimens of various agricultural products. The three schools ranking highest in the contest in 1926 were Pickens, Lexington, and Lydia.

Textile Testing.—The textile department maintains a yarn testing service for the cotton mills of South Carolina.

Textile Research.—Clemson in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture conducts manufacturing tests of grades, staples and varieties of cotton. Valuable reports based on this work are issued from time to time. Copies of the same may be had by addressing either the college or the Bureau of Agricultural Economics.

PART VII.—HISTORY, BUILDINGS AND EQUIPMENT

HISTORICAL BACKGROUND

Clemson College is the result of the scholarship, experience, and vision of Thomas G. Clemson. Without thought or inquiry one might conclude that the name represents merely the accident of the marriage of Thomas G. Clemson to Anna Maria, the gifted daughter of John C. Calhoun. But when one has taken the trouble to pry into the life of Clemson, he is likely to conclude that Clemson College marks simply the culmination of years of study, of thought, of experiences and of high aim along the lines of science, particularly of science pertaining to agriculture.

Thomas G. Clemson was a Pennsylvania product. He was born in Philadelphia, July 1, 1807. His forbears settled in early colonial days in the rich Pequea valley and here they remained as tillers of the soil of Lancaster county. His father, however, was a merchant of Philadelphia. The name of Clemson is prominent in Pennsylvania today and appears upon the rolls of the army of every war in the nation's history.

Young Clemson, probably about 1826, having become interested in chemistry by study in a laboratory in Philadelphia, decided to go where he would have better opportunities, so he went to Paris.

He worked in chemical laboratories in Paris, attended lectures at the Sorbonne and, in 1832, through the influence of the American Consul, was admitted to the Royal School of Mines of France. In 1831 he received a diploma as Assayer and seems to have been employed in some capacity in Paris as assayer and chemist for most of the years 1832 to 1836.

The latter year found him again a resident of the United States, dividing his time between Philadelphia and Washington, engaged in practicing the profession of consulting mining engineer. His services seem to have been much in demand, for although he either inherited little from his father, or was unlawfully deprived of his inheritance, by 1838 he seems to have acquired a modest competence.

He was of sufficient importance socially to mingle in the highest circles of Washington and to marry John C. Calhoun's daughter. They were married at Fort Hill in November, 1838.

At the same time Mr. Clemson seems to have formed an attachment for his distinguished father-in-law, which remained with him during his long life. The Calhoun and Clemson correspondence contains a large number of letters, which passed regularly between these two men until the former's death in 1850. These

letters cover a great range of subjects in which, when it comes to scientific matters, Mr. Clemson was the chief contributor.

For much of the time between 1838 and 1843 the Clemsons lived at Fort Hill. Clemson's letters of this time to Calhoun contain frequent reference to such matters as Calhoun's mining interest at Dahlonega, Georgia, to which Clemson was devoting some attention, and to the activities on the Fort Hill plantation such as the introduction of the English Red Devon cattle, which Calhoun with Clemson's aid introduced into South Carolina at Fort Hill. Calhoun was a practical farmer. Clemson learned from him. Clemson was a scientist with a practical turn. Calhoun learned from Clemson.

In 1843, Clemson, having decided to become a Southern planter, purchased Canebrake plantation in Edgefield district and stocked it with slaves. Many letters between these two men refer to the management of this plantation and to the agricultural economy of the South.

From the vantage point of industrial Belgium, Clemson wrote to Calhoun, May 29, 1846, that he had received a letter from Mr. Pickens, who, as an act of friendship, was giving some attention to Canebrake plantation. Says Mr. Clemson's letter: "He (Mr. Pickens) further states that the negro cloth was all woven on the place." And Clemson adds, "My desire is that everything should be done on the place that could be done, even to making leather and shoes. If we were to suffice our wants on a plantation, the Southern country would be vastly more prosperous and the character of the people elevated, unless we turn our attention to the arts (no matter how coarse) we shall always be a prey to the superiority of the North and the rest of the world." Clemson as early as this displayed a keen understanding of Southern problems.

The Clemsons went to live in Belgium in 1844, where, until 1851, he served as charge d'affaires of the American Legation.

In Belgium, Mr. Clemson had a rare opportunity of studying European farm problems and developments. It was during the period of his residence in Europe that Liebig and Johnson, famous chemists, were laying the foundation of modern scientific agriculture. He was an interested and appreciative observer.

When the Clemsons, having sold Canebrake plantation and their slaves, returned to the United States in 1851, they went to a Maryland farm. This was a place they called "The Home" near Bladensburg, Maryland, then about four miles from Washington. Here Mr. Clemson lived until the outbreak of the Confederate war. His time seems to have been divided between the practice of his profession of mining engineer and chemist and practical farming or to a study and administration of the sciences pertaining to agricultural practice.

For this period we have fullest record of his scientific and administrative activities and observe him at his best. He is best seen through the columns of *The American Farmer*, a Baltimore Agricultural Journal, to which he was rather a constant contributor for several years at the solicitation of the editor, through his contributions to the *Journal of the United States Agricultural Society*, and through the reports of the Commissioner of Patents.

In *The American Farmer* of July 1856 we see him as a promoter of agricultural education. The states were beginning to establish the agricultural colleges, the forerunners of the Land Grant Colleges. Clemson was asked by Robert Bowie, President of the Maryland Agricultural Society, to aid.

In an open letter to Mr. Bowie Mr. Clemson says in part, "You do me the honor to say that an expression of my approval would materially aid you in canvassing the State in behalf of the proposed institution."

"The only hope we have for the advancement of agriculture is through the sciences, and yet there is not one single institution on this continent where a proper scientific education can be obtained. Those who wish to cultivate the sciences are compelled to resort to the institutions maintained by the monarchical governments of Europe."

"(By) such a project poor lands will be invigorated, the recuperative energies of exhaustive soils restored and wealth and prosperity will prevail where desolation, want and wretchedness now obtain."

A few months later asked to speak at a banquet at which the Maryland Agricultural College was being promoted, he, declining because of a business engagement in New York, addressed the President of the Agricultural Society, Mr. James T. Earle, in part as follows:

"The subject is one of momentous interest, one of light or darkness, poverty or wealth, and comparative degradation or elevation. The only possible hope for the advancement of the arts is through science. The latter is the foundation upon which the former are built. Those who depend upon routine, must ever be behind, and advancement by that route is almost impossible. Science is correct practice, authentic, unerring history of all that has been discovered and invented since the creation of man.

"Bounteous heaven has given man the raw materials of which this world is composed. It is science that teaches how they may be transformed and made subservient to our wants. Those who look upon this wonderful creation as a heterogeneous haphazard mixture of innumerable materials, are wrong. The science of the world is advancing, has advanced, and will continue to advance as long as civilization continues, and it is questionable if the

world has advanced in any other way than through science, at once the cause and effect of civilization."

Says H. B. Learned in "The President's Cabinet": "In government circles there was throughout the decade (1840-1850) a decided inclination in favor of establishing a Bureau of Agriculture—which would have placed (the agricultural activities) under an official directly responsible to the Secretary of the Interior."

One such effort says Learned was "a project of Buchanan's Secretary of the Interior (Jacob Thompson of Mississippi) in 1859 to place Thomas G. Clemson in direct charge of a Bureau." His title was Superintendent of Agricultural Affairs, a place he held from 1859 to March 4, 1861.

The first Morrill bill providing for the establishment of the Land Grant Colleges was passed February 1859 but was vetoed by President Buchanan.

Mr. Clemson addressed a letter to The American Farmer of date February 1859 on "The Necessity and Value of Scientific Instruction." A few quotations from this letter reveal his interest and enthusiasm on a subject in which he seems to have been successful in arousing much enthusiasm in others. Says this letter, "The Advisory Board of Agriculture met last month and held its sittings in the Patent Office at Washington. It was called by the Secretary of the Interior and was composed of gentlemen connected with agriculture . . . "

"So far as I could judge, there was unanimity in favor of Scientific Education . . . Some thought that an independent agricultural bureau, having at its head a Secretary, equal in rank etc, with other Departments was essential . . . All, as far as I could learn, were in favor of donations of lands, from the public domain to the States, on certain conditions, for the establishment of Agricultural Colleges . . . "

"I have long been of the opinion that the time would surely come, when in this country, more than in any other, the demand for scientific instruction, and that in its highest grade, would be imperative."

"So far as I can understand, there is no higher, no better manner of forming or methodizing the mind, than through the sciences. They open a vista for reflection, which is unbounded; and from the separate works of the Almighty, the inquirer after truth is led, step by step, with increasing admiration, nearer and nearer to the immaculate archtype of creation."

"Science would appear to be the most elevating of occupations for the mind. If we are not permitted to comprehend the Almighty, his works and the laws that govern the universe, are at least partially within our comprehension, and the contemplation must exalt the understanding and purify the mind."

In the capacity of Superintendent of Agricultural Affairs, he set forth his opinions and recommendations in "Preliminary Remarks" in the Patent Office Report, Agriculture for 1860. Says this report:

"The requirements of the present age, and the permanent importance of the subjects embraced in its operations, demand that the powers of this agency of the government should be enlarged. This opinion was expressed in the views I had the honor to submit to the Secretary of the Interior at the period of my being called by that functionary to the position of Superintendent of Agricultural Affairs."

"A vast majority of the intelligent agriculturists of the country, dissatisfied with the limited functions now exercised by the government, not only confidently anticipate, but demand an organization at least equal in importance to that of any other department."

It is not too much to assume, therefore, that Clemson's part, through organizing sentiment and by enthusiastic support, was quite influential in bringing about the passage by Congress of the Morrill Act of 1862 and the Organic Act of May 15, 1862 by which respectively the Land Grant Colleges and the Department of Agriculture were made possible.

In an article on "Fertilizers" published in the Patent Office Reports of 1850 and 1860, Clemson shows a thorough grasp of chemistry, "both as a science, and in its application . . . to agriculture and to industry."

Mr. Clemson resigned his post on March 4, 1861, since his sympathies were with the South. He was beyond military age and might have remained a neutral. But both he and his young son, John Calhoun Clemson, early in 1861, went into the confederate service. The son rose to a captaincy. Mr. Clemson served until the end of the war being then Supervisor of Mines and Mineral Works.

Mrs. Clemson toward the end of the war, had left her Maryland home to go to live with her mother at Pendleton, South Carolina. Here Mr. Clemson joined her in 1865 and here, or at Fort Hill, he lived for the remainder of his life.

These were the fearful days of Reconstruction. But Mr. Clemson was scarcely established at Pendleton before he begins to turn his attention to the matter of his chief interest—scientific education.

Mr. A. P. Calhoun, to whom Mrs. John C. Calhoun had sold Fort Hill with all the slaves, having died during the war with the bond and mortgage he had given to his mother unpaid, Mrs. Calhoun brought suit of foreclosure against the estate. Mrs. Calhoun died in July 1836 in the midst of the suit, she having willed

the Fort Hill estate,—one-fourth interest to her grand-daughter, Floride Clemson Lee, and three-fourths to her daughter, Mrs. Thomas G. Clemson.

The Fort Hill estate sold at public auction for \$15,000 and was bought in by Mr. Thomas G. Clemson acting for his wife and his daughter, Mr. Clemson paying out of his own funds the large costs of the long litigation amounting to something like \$8,000.

Through Mr. Clemson's influence a committee from the Pendleton Farmers' Society was appointed Nov. 1866 to appeal for—

“Aid to found an institution for educating our people in the Sciences, to the end that our Agriculture may be improved, our worn and impoverished soils be recuperated and the great natural resources of the South be developed.” This committee consisted of Thomas G. Clemson, R. F. Simpson and W. A. Hayne. Other appeals were made in which Mr. Clemson was the mover. In 1869, the minutes of the Society tell of an instructive address on his favorite subject by the President, Mr. Thomas G. Clemson.

In 1871, the last of the Clemson's three children was tragically killed. This was Capt. John Calhoun Clemson. His sister, Mrs. Floride Clemson Lee, had died unexpectedly seventeen days earlier.

Soon after this Mr. and Mrs. Clemson determined to use part or all of the Fort Hill estate, which had now come into the former's possession, for the establishment of an agricultural college.

On August 9, 1874 a committee, selected by Mrs. Clemson, addressed a circular to the people of the State for support for founding a college at Fort Hill. Mrs. Clemson offered land, the circular stated, and “assurances of aid from other sources both able and disposed to give liberal assistance” were assured. A letter from Mr. Clemson to W. W. Corcoran of Washington reveals that this aid was promised from Mr. George Peabody of New York. The people could not or would not respond.

Mrs. Clemson died suddenly in 1875 leaving her share of the Fort Hill estate to Mr. Clemson, who was pledged to carry out Mrs. Clemson's desires.

On October 29, 1878 he addressed a letter to W. W. Corcoran of Washington asking for aid in founding this institution.

Asked for advice, Colonel R. W. Simpson, a member of the General Assembly, addressed a letter dated January 11, 1882 to Mr. Clemson advising him “to execute a deed to the property to the State to take effect at your death, provided the State will agree to erect and maintain an agricultural college.”

This will was written shortly after that time by Colonel Rion but was rewritten in 1886 by Colonel Simpson. Mr. Clemson died at Fort Hill April 6, 1888.

Says the will in part:

"Feeling a great sympathy for the farmers of this State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an Agricultural College upon the Fort Hill Place. My purpose is to establish an Agricultural College which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical with intellectual education, and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish a course of studies terminating in thorough theoretic and practical instruction in those sciences and arts which bear directly upon agriculture. * * * * but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries. * * * I trust I do not exaggerate the importance of such an institution for developing the material resources of the State, by affording its youth the advantages of scientific culture.

"The desire to establish such a school or college as I have provided for in my said last will and testament, has existed with me for many years past, and many years ago I determined to devote the bulk of my property to the establishment of an Agricultural School or College. To accomplish this purpose is now the one great desire of my life."

This will gave all that part of the Fort Hill estate inherited by Mrs. Clemson from her mother and the bulk of Mr. Clemson's other real and personal property. The latter amounted to a sum, which, considering the purchasing power at the time, probably has been only a few times exceeded in a public benefaction in South Carolina.

It provided for a Board of Trustees of seven members, to-wit: R. W. Simpson, D. K. Norris, M. L. Donaldson, R. E. Bowen, B. R. Tillman, J. E. Wannamaker, and J. E. Bradley, who with those chosen by the General Assembly should constitute a governing board in case the State accepted the bequest; but, who, in case the State declined the bequest, should alone constitute a governing board for a private institution.

These seven trustees, along with other friends of the movement, and the agricultural groups in the State developed and organized a public opinion favorable to the plan.

In November 1889, the General Assembly of South Carolina accepted the terms of the will, and, following the decision of the United States Supreme Court to uphold the will, the State of South Carolina and the full Board of Trustees proceeded to convert the dream of Thomas G. Clemson into the reality of Clemson College.

THE COLLEGE

The college was opened in July 1893, with an enrollment of 446 students. The session extended from the third Thursday in February to the third Thursday in December, with the idea of giving all students in agriculture an opportunity to be instructed in the practical phases of that subject during the crop-growing season.

On the night of May 22, 1894, the main college building was burned, but the regular work continued, and the building was promptly re-built.

The first graduating exercises were held in December 1896, the graduating class numbering thirty-seven,—fifteen in the agricultural courses, and twenty-one in the engineering courses. In the fall of 1897, the session was changed to begin in September and close in June, as it had been found inadvisable to operate the college through the hot summer months. The exercises of the second commencement which would normally have occurred in December 1897, were held February 6 to 9, 1898. The undergraduate classes were continued until June. Owing to the change from winter to summer vacation, there was no class graduated in 1897.

By an act of the State Legislature in the session of 1904, and amended in the session of 1907, 165 beneficiary scholarships were established, of the value of \$100 per annum each, and free tuition apportioned among the counties as are the members of the Senate and House of Representatives. The number has since been increased to 170, by the creation of five new counties.

ENROLLMENT				GRADUATES BY COURSES.										
Years	Regular Sessions	Summer School	Total Enrollment	Agriculture	Mech. Elec, Engr., **	Electrical Engr.	Mechanical Engr.	Civil Engr.	Architecture	General Science Academic	Chemistry *	Textile Engr.	Textile Indus- trial Engr.	Total Graduates
1924-1925	1155	484	1639	50	—	29	10	17	6	1	1	10	22	146
1925-1926	1032	55	1071	44	—	25	11	8	4	1	6	8	14	121
1926-1927	1037	68	1205	58	—	29	11	24	7	14	1	8	7	158
Totals	24452	607	27347	11161	514	171	99	283	49	15	67	237	45	2646

(*) Includes Chemical Engineering.

(*) Includes 13 graduates in Chemistry and Geology.

(**) Courses separated after 1920.

COLLEGE BUILDINGS AND GROUNDS

Location.—The college is located on the Fort Hill homestead of John C. Calhoun, on the dividing line between Oconee and Pickens counties, in the picturesque foothills of the Blue Ridge. It has an elevation of 800 feet above sea level, and commands an excellent view of the mountains to the north and west, some of which attain an altitude of nearly five thousand feet. The climate is invigorating and healthful, and the surroundings are in every way favorable to the highest physical and mental development.

Clemson is easily accessible by highway being located on one that is paved. State highways number 2 and number 15 pass through Clemson and a bus service is maintained which operates daily at regular intervals on each.

The college is one mile from Calhoun, a station on the main line of the Southern Railway, and two miles from Cherrys, on the Blue Ridge Railroad. By means of these roads and their connections, the college is easily accessible from all parts of the State. It is connected by telegraph and long-distance telephone with all parts of the country. The post office is conveniently situated on the campus, and receives eight daily mails.

Grounds.—The college grounds comprise about 1544 acres, including the campus, the farm, and the Experiment Station grounds. The campus, including about 200 acres, is laid out in walks, drives, and lawns, and is shaded by a beautiful grove of native forest trees.

"Bowman Field," lying just in front of the Academic, Textile, and Y. M. C. A. Buildings, provides for part of the military drill.

"Riggs Field," a ten-acre athletic field, the largest and best arranged of its kind in the South, is located to the west of the Y. M. C. A. Building, and provides for baseball, football, track, tennis and military drill.

ADMINISTRATION BUILDING

The administration building is a three-story brick structure, 100 by 132 feet, trimmed with gray sandstone. It contains 36 rooms including recitation rooms, literary society halls, and the offices of the President, the Registrar, the Commandant, the Treasurer, the Director of Student Affairs, the Alumni Secretary, and the Director of Athletics. The public **Telegraph Office** is on the ground floor of this building. Adjoining this building is Memorial Hall, the College Chapel, which has a seating capacity of about eighteen hundred. It is used for religious services and as an assembly room. In the basement are the class rooms and laboratories of the physics division. The entire building is provided with steam heat and electric lights.

LIBRARY

The college library is one of the most beautiful buildings on the campus being of colonial style and constructed of red brick with columns and trimmings of stone. In this building is housed the general and reference library, as well as the experiment station library. There are more than thirty thousand five hundred volumes and approximately ten thousand public documents and government publications.

A very commodious reading room is provided and a well selected list of periodicals is made readily accessible to the students.

In the balcony of the reading room are found the oil paintings collected by Mr. Clemson as well as a large collections of portraits.

ENGINEERING BUILDING

While the new engineering building, to replace the one destroyed by fire in 1926, is not completed at the time this catalog goes to press, plans are complete and construction is under way.

The general assembly appropriated \$100,000. toward the building and authorized the loan of an additional \$150,000. When completed the building with cost \$250,000.

The building will be of reinforced concrete and tile construction, thoroughly fireproof. Exterior walls will be of red tapestry brick, and the roof of blended red tile. Entrances and trim are of limestone. In general design the building will be in the Italian Renaissance style. It will have a long central sweep, broken by the main entrance of rusticated limestone surmounted by a balustrade and a broken pediment motif. There are two end pavilions each having a large limestone window with wrought iron balustrades and arched windows above.

The new building will be located on the site of the junior electrical laboratory, facing north, with the main entrance directly on axis with the present walk leading from the administration building. Roads and walks in the vicinity of the site will be changed in accordance with the new landscape plan.

The entire basement floor will be given over to mechanical and civil engineering laboratories. Provisions are made for a large testing laboratory and a mechanical laboratory of the same size. Smaller laboratories are also provided.

Mechanical and electrical engineering will occupy the first floor. Two class rooms, a large laboratory, and an office are included in one half of the floor for the electrical division. Four class rooms and office space for the mechanical engineering division, a department library, and director's offices, comprise the other half.

Engineering drawing rooms and civil engineering class rooms will occupy most of the second floor. One wing is devoted to electrical class rooms and laboratories.

The entire third floor, with the exception of one room, will be devoted to architecture. Four large drafting rooms, a studio, two class rooms, an architectural library and offices, are included in the plan for the floor. There is also on the third floor a large assembly room which will accomodate all electrical and mechanical students.

The building is to be of simple and economical design, and will be thoroughly modern in every respect. Engineering buildings of various other institutions have been studied in making the plans for this building, and it will include the most desirable features of each.

ELECTRICAL ENGINEERING LABORATORIES

A one-story brick building designed for delicate instrument work, contains the instrument laboratory, the standardizing laboratory, room for storing instruments, supply room, and the division office.

Adjoining the above is another single story brick building which contains the lecture room 25 by 35 feet (equipped with raised seats); the dynamo laboratory 35 by 53 feet; and large dark room and supply room.

TEXTILE BUILDING

This building is a brick structure of modern cotton mill design, 168 by 75 feet. It is of the slow-burning type, built according to fire insurance regulations, after plans of an experienced mill engineer. The building, although designed for educational and experimental purposes, containing office, lecture rooms and laboratories, retains the more prominent features of a typical Southern cotton mill. This affords the student an opportunity of gaining many points of valuable information in connection with mill construction, along with the manipulation of cotton fibres and the study of cotton mill processes and operations.

CHEMISTRY BUILDING AND EQUIPMENT

Two brick buildings, each about 80 by 50 feet with two stories and a basement, connected on both floors by glass enclosed passages, are devoted to the work of this department.

The south building is used almost entirely for academic work. On the first floor are six rooms: a physical chemistry laboratory, a balance room, a laboratory for quantitative analyses for juniors and seniors, and an experiment station laboratory. On the second floor of this building are three rooms: a laboratory for

general chemistry for freshmen and sophomores beginning chemistry, a laboratory for quantitative, qualitative, and organic analysis for juniors and sophomores, with an adjoining balance room.

The north building serves partly for academic and partly for the analytical work of the Fertilizer Analysis Division of the Public State Work of the college. The first floor of this building is given up to the latter work. There are nine rooms on this floor: one is used as the director's office; one as a laboratory for water analysis and miscellaneous analytical work; one is used for nitrogen work, and adjoining this room is a small room used as an office and balance room by the chemist of the fertilizer control; the five rooms on the other side of the wide hall extending the full length of the building are devoted to the analysis of fertilizers, three of them being equipped as laboratories for the determination of phosphoric acid, potash and ammonia; one being used as a balance room, and the last as a store room for fertilizer samples. On the second floor of this building there are six rooms: two are used as lecture or class rooms, one of which can accommodate about 150 students and the other 49; one room is used as a preparation room in connection with lecture experiments; one is fitted for electro-chemical work; one is used as a chemical library, and an adjoining room as a reading room. The library contains several hundred volumes of standard books, which are partly card indexed according to the most modern system, and the reading room a dozen or more journals devoted to chemistry. The library also contains many valuable pamphlets and bulletins. Both the library and reading room are open to students as well as to members of the department and to the college faculty.

These class rooms and laboratories are well equipped for carrying on the work as offered in the different courses.

FERTILIZER BUILDING

This is a three-story brick building, situated near the south chemistry building, and containing the offices of the Secretary of the Board of Fertilizer Control, fertilizer tag rooms, etc.

The Clemson College Post Office occupies the ground floor of this building.

VETERINARY HOSPITAL

The veterinary hospital is a two-story frame building 48 by 65 feet, with basement 18 by 30 feet. It is furnished with electric lights, hot and cold water, and is heated by means of stoves. The basement contains a store room. The class room, office, pharmacy.

and a well-equipped clinic and operating room are on the first floor. A laboratory for class work, a private laboratory and a store room for supplies are on the second floor.

DAIRY BUILDING

The dairy building is constructed of red brick trimmed with lime-stone. In addition to class rooms and laboratories it contains the offices of the following divisions: animal husbandry, dairy, horticulture, and education. It is equipped with modern machinery for the manufacture of butter, ice cream and other dairy products, and for teaching modern methods of dairying.

DAIRY BARN

The dairy barn will accomodate both the experiment station and college herds. It is large enough to house 120 cows and all the feed required for these animals. It has separate box stalls for bulls and young stock. These floors are of cement, and cork brick is used on the floors where the cattle lie. The lighting, ventilation, sanitation, stanchions, stalls and the equipment for cleaning and feeding are of the most modern type to be found in the country. The milk is handled carefully in accordance with the best practice and experience of modern dairy methods. Nearby is a calf barn and a hog barn embodying the most recent improvements in such buildings. There are also four large cement silos conveniently located, where the stock feed is kept to supply these barns.

POULTRY PLANT

This is one of the most recent additions to the college teaching facilities. A full time superintendent is employed. His residence is near the other buildings.

The plant consists of several laying houses as well as a large number of colony houses. Besides the buildings and pens there is sufficient equipment for conducting both research and collegiate instruction in poultry husbandry. A large number of fowls is kept at the plant.

The plant was given by a friend of the institution who is interested in promoting the agricultural welfare and readjustment in the State.

Y. M. C. A. BUILDING

This building is in the Italian Renaissance style of architecture, of texture brick with colored tile inserts, terra cotta trimmings, and red tile roof. The interior finish is of stained yellow pine. It contains four floors—basement, mezzanine, first floor, and dormi-

tory floor, giving a total of thirty-six thousand square feet of floor space. It is lighted by the indirect system, and has steam heat and modern water facilities.

The basement contains a basket-ball room, kitchen, quick lunch room, private dining room, general confectionery store and soda fountain, two bowling alleys, swimming-pool, shower and locker rooms, and general toilet.

The mezzanine floor is given over principally to committee rooms, retiring rooms, and balconies.

On the first floor are the general offices, reading, games, and lounging rooms, a ladies' club room, and an auditorium. The dormitory floor has thirteen living rooms, a literary society hall, a masonic lodge room, and motion picture machine facilities.

The building is handsomely furnished and equipped to make a large contribution to the religious, social, and physical life of the student body and the community.

RESIDENCES

Nine brick and fifty-nine frame residences, situated on the campus, furnish homes for most of the college teachers and officers.

BARRACKS

The cadet barracks comprise three large brick buildings. One is four stories high and contains 247 rooms for students. In the basement of this building is the dining hall 170 by 44 feet and the kitchen 50 by 37 feet. The second building is 199 by 42 feet, and contains 104 rooms. The third building is 45 by 190 feet and contains 111 rooms.

These buildings are heated by steam and lighted by electricity, and have an abundant supply of pure water. The rooms in the barracks are furnished with single-width iron cots and other necessary appointments. The dining hall is well supplied with table linen, silverware and china and the kitchen is furnished with modern culinary appliances.

The bathrooms and toilets are in general located in brick buildings apart from the barracks and connected with them by covered gangways.

CALHOUN MANSION

The former residence of John C. Calhoun, is kept in honor of his memory, in accordance with the provisions of Mr. Clemson's will.

The Calhoun Relics.—Several pieces of furniture and other interesting relics, formerly the property of Mr. Calhoun, are carefully preserved in the Calhoun Mansion, where they may be seen by visitors to the college.

CLEMSON COLLEGE HOTEL

The hotel, a frame building with one eight-room annex, situated on a hill overlooking the campus, is operated by the college. This furnishes a home for many officers and teachers.

HOSPITAL

The hospital, located about a quarter of a mile from the barracks, is a wooden building, especially designed for the purpose. It is lighted by electricity, and has a thorough sewerage system. It is in the immediate charge of the Surgeon, who is assisted by two experienced nurses thus insuring the best personal attention to each patient. The hospital is equipped with Victor X-ray machine, and the latest design souresine machine for ear, eye, nose and throat treatment. There is also other necessary surgical instruments for minor operations and a well equipped laboratory.

LAUNDRY

This is a brick building especially constructed and fitted with the improved machinery of a modern steam laundry, and is operated exclusively for the students.

FARM BUILDINGS

The college farm is provided with commodious barns and other farm buildings of modern design, which are described more fully in connection with the equipment for instruction in agronomy.

HORTICULTURAL GROUNDS

The ornamental horticultural grounds are situated south east of the campus. Their acreage is devoted to the growing of various trees, shrubs, and flowers, and affords a beautiful park area as well as a small ornamental nursery. The experimental horticultural grounds are located east of the campus and comprise about twenty acres. This area is devoted to experiments with apples, peaches, grapes, pecans, and small fruits. Vegetable and truck crop experiments are conducted in a fertile bottom along the banks of the Seneca River, about one mile south west of the campus.

Greenhouses.—Three modern greenhouses provide excellent facilities for horticultural work.

PUBLIC UTILITIES

The General Water Supply is taken from Hunnicutt Creek about three-quarters of a mile above the pump station. The water flows by gravity to a settling basin 36 feet by 36 feet, and from there through two gravity filters having a capacity of three hundred and fifty gallons per minute. The filtered water passes to a storage reservoir from which it is pumped into a stand pipe one hundred feet high having a capacity of 130,000 gallons. From this it is distributed from the main to the various college buildings and to all parts of the campus. This water is tested regularly to see that it is kept free from all contaminations.

The Drinking Water Supply is pumped from a bold spring in a continuous stream through the barracks. It is thus furnished fresh, pure and cold. This and all sources of water supply are kept under constant and strict surveillance and the waters are frequently analyzed as a precaution against contamination.

The Sewer System.—All of the larger buildings and most of the residences are connected with an adequate sewer system, which empties into the Seneca River more than a half mile from the campus.

LIGHT AND HEAT

All of the college buildings and residences on the campus are lighted by electricity. The principal college buildings are heated by steam.

Refrigerating Plant.—In connection with the commissary there is a refrigerating plant consisting of the following: One 6-ton Frick double-cylinder compressor supplied with gauges, etc.; one double-pipe condenser; one triple-pipe brine cooler; 25 cans of 50 pounds capacity each, and a brine reservoir for use in ice-making or refrigeration. The following rooms are cooled by the plant; One room 12 by 13 feet for general storage, one 6 by 8 feet for milk and butter, one 6 by 8 feet for fruit and vegetables, one 6 by 12 feet for meat, and two rooms 6 by 6 feet each, in charge of the chef, and used for storage of supplies in transit to dining hall.

POWER STATION

The central power and heating plant contains two 150-hp. Stirling water-tube boilers, and two 100-hp. Lombard return tubular boilers, two Babcock and Wilcox 150-hp. water-tube boilers with the necessary pumps, feed water heaters, and other auxiliary apparatus.

The power equipment consists of one 114-kw. Fleming side-crank engine with unallow cylinder direct connected to a 70 kw. 2,300-volt, three phase alternator, with direct connected exciter, and one 122-hp. Fleming four-valve engine, direct connected to a three-wire 75-kw., direct-current generator, one 200 kw. turbo-generator two stage, 2,300 volt, 3-phase alternating current with direct connected exciter.

A 75-kw. rotary converter is used to convert from one kind of service to another.

The switchboard equipment consists of three standard blue Vermont marble panels, and five black enameled slate panels, all equipped with the latest and best electrical instruments and appliances. The alternators are connected to the rotary converter through three 25-kw. transformers. All the machinery is of the General Electric Company make.

The building is 40 by 108 feet, is a single story of brick and cement blocks, with metal roof.

The plant complete cost about \$53,000.00, and is in every way modern and up-to-date. It furnishes steam heat for the barracks and other college buildings. The pumping station, situated about one-half mile distant, is electricially operated from this plant. This pumping plant has both steam and electric pumps and an aggregate capacity of 1,100 gallons per minute.

CLEMSON COLLEGE ALUMNI ASSOCIATION

The Alumni Association has established a permanent office in the main building on the campus. The office is in charge of a full-time secretary, who is employed by the Governing Board of the association. The clemson office is a clearing house for all matters concerning the alumni. In addition to keeping accurate records of addresses and information concerning alumni, the association has established at the Clemson headquarters a bureau for repairing Clemson Class rings, and for securing duplicates of these rings.

A valuable service to alumni is rendered in assisting them in securing employment. Many employers have made contacts with alumni through the secretary's office.

The association holds its regular annual meetings at the college on Monday of commencement week. At this meeting all officers, with the exception of the secretary, are elected. The secretary is elected by the Governing Board which is in turn responsible to the general association for the conduct of its business. The purpose of the Alumni Association is to serve the college and the alumni in every possible way. All correspondence regarding its affairs is conducted through the Clemson office.

PART VIII.—COURSES OF STUDY

REQUIREMENTS FOR DEGREES

The degree of **Bachelor of Science** is awarded to those students who satisfactorily complete one of the four-year curricula. The course completed is specified on each diploma.

All work for a degree must be completed by 5 P. M. on the Saturday preceding commencement. Residence of at least one regular session is required for graduation. Diplomas are delivered to the candidates on Commencement Day.

Every candidate for a degree must pay to the Treasurer of the college prior to graduation the cost of the diploma.

The college offers the following courses of study:

AGRICULTURE

- (a) Four-year courses in Agriculture with major work in Agricultural Economics, Agronomy, Animal Husbandry, Chemistry, Dairying, Education, Entomology and Horticulture.

CHEMISTRY

- (a) Four-year course in Chemistry.

ENGINEERING

- (a) Four-year course in Architecture.
- (b) Four-year course in Civil Engineering.
- (c) Four-year course in Electrical Engineering.
- (d) Four-year course in Mechanical Engineering.

TEXTILE

- (a) Four-year course in Textiles.
- (b) Four-year course in Industrial Education.

ARTS AND SCIENCE

- (a) Four-year General Course
- (b) Pre-Medical Course.

SUMMER SCHOOL

Short courses are offered during the months of June and July to teachers, cotton graders, agricultural club boys, and college students.

(EXPLANATION—In the curricula which follow, are given the official title and number of the course, the descriptive title, number semester hours credit, and in parenthesis the number of hours per week in class and laboratory respectively.

I.—AGRICULTURE

The course in agriculture, supplemented by work in mathematics, English, political economy, rural sociology, history, and the natural sciences, allows no differentiation during the first and second years. Its object is to give the student a broad general knowledge of the subject so that he will have a sound foundation for specialization during his junior and senior years. At the end of the sophomore year it is expected that he will be able to choose intelligently which line of agricultural work he desires to follow.

In the junior year a student is given the choice of electing agricultural economics, agricultural education, agronomy, animal husbandry, chemistry, dairy, entomology or horticulture. A major course requires approximately six hours per week of recitations, and six hours per week of laboratory each semester. In addition to the major work during the senior year, a sufficient number of elective courses must be selected to bring the number of semester credit hours up to not less than 16 and not more than 18. Elections are made as group electives of certain coordinated courses as shown on the following pages. Any course is elective provided the requirements of the major curriculum are fulfilled and the student has had the prerequisites of that course and meets the other conditions. The electives chosen are subject to the approval of the heads of divisions and the director of the department. A minimum of 16 semester credit hours is required. No student can elect over 18 semester credit hours without special permission of the faculty.

I.—AGRICULTURE

FRESHMAN YEAR

First Semester		Second Semester	
Agr. 11, Field Crops	3 (3.0)	Ag. Ec. 12, Elementary Ag. Ec.	3 (3.0)
Chemistry 11, General	3 $\frac{2}{3}$ (3.2)	A. H. 12, Farm Animals	2 $\frac{2}{3}$ (2.2)
English 11, Comp. and Am. Lit.	2 (2.0)	Chemistry 12, General	3 $\frac{2}{3}$ (3.2)
History 11, Political Science	3 (3.0)	English 12, Comp and Am. Lit.	2 (2.0)
Library 11,* How to Use	R	Hort. 12, Veg. Gard.	2 $\frac{2}{3}$ (2.2)
Math. 11, Ag. Mathematics	3 (3.0)	Military Science 12,	1 $\frac{2}{3}$ (1.2)
M. E. 11, Ag. Shop, Forge	$\frac{2}{3}$ (0.2)	Orientation	$\frac{1}{3}$ (0.1)
M. E. 11, Ag. Shop, Woodwork	$\frac{2}{3}$ (0.2)	Physical Education 12,	$\frac{2}{3}$ (0.2)
Military Science 11	1 (0.3)	Poultry	1 $\frac{2}{3}$ (1.2)
Physical Education 11	$\frac{2}{3}$ (0.2)		

18 $\frac{1}{3}$ 17 $\frac{2}{3}$

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE A two hour per week non credit course will be required of all students who do not show a proficiency in English Composition.

SOPHOMORE YEAR

Agr. 21, Farm Machinery	2	$\frac{2}{3}$ (2,2)	Agr. 20, Soils	2	$\frac{2}{3}$ (2,2)
Botany 21, Agricultural	2	$\frac{2}{3}$ (2,2)	Botany 22, Agricultural	2	$\frac{2}{3}$ (2,2)
Chemistry 21, Analytical	2	(1,3)	Chemistry 22, Organic	2	$\frac{2}{3}$ (2,2)
English 21, Lit. and Adv. Comp	2	(2,0)	Dairy Husb., 20, Dairying	2	$\frac{2}{3}$ (2,2)
Geology 21, Agricultural	3	(3,0)	English 22, Lit. and Adv. Comp. 2	2	(2,0)
Military Science 21	1	(0,3)	Military Science 22	1	$\frac{2}{3}$ (1,2)
Physics 29	2	$\frac{2}{3}$ (2,2)	Z. & E. 22, Zoology	2	$\frac{2}{3}$ (2,2)
16			17		

JUNIOR YEAR

Economics 31, General Economics 3	3	(3,0)	English 32, Public Speaking	1	(1,0)
English 31, Public Speaking	1	(1,0)	Military Science 34,	1	(0,3)
Military Science 33	1	(0,3)			

SENIOR YEAR

Military Science 43	1	(0,3)	Military Science, 44,	1	(0,3)
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I.—(a) AGRONOMY

JUNIOR REQUIRED

First Semester			Second Semester		
Agr. 31, Fertilizer & Manures	2	(2,0)	Agr. 30, Forage Crops	3	(3,0)
Bacteriology 31, General	3	$\frac{1}{3}$ (2,4)	Agr. 32, Genetics	2	$\frac{2}{3}$ (2,2)
Hort. 31, Fruit Growing	2	$\frac{2}{3}$ (2,2)	Agr. Ec. 32, Price Economics	2	$\frac{2}{3}$ (2,2)
Z & E. 31, Gen. & App. Ent.	2	$\frac{2}{3}$ (2,2)	Bot. 32, Forestry	2	$\frac{2}{3}$ (2,2)
10 $\frac{2}{3}$			11		

SENIOR REQUIRED

Agr. 41, Cotton	2	(2,0)	Agr. 42, Soil Fertility & Man. 2	2	(2,0)
Agr. 45, Cereals	2	(2,0)	Agr. 44, Advanced Soils	$\frac{2}{3}$	(0,2)
Agr. 47, Adv. Crop Lab.	$\frac{2}{3}$	(0,2)	Agr. 50, Soil Problems	1	(1,0)
Agr. 49, Plant Breeding	2	$\frac{2}{3}$ (2,2)	Bact. 44, Soils Bacteriology	3	$\frac{1}{3}$ (2,4)
Agr. 51, Crop Problems	1	(1,0)			
8 $\frac{1}{3}$			7		

I.—(b) ANIMAL HUSBANDRY

JUNIOR REQUIRED

First Semester			Second Semester		
A. H. 31, Prin. of Feeding	2	$\frac{2}{3}$ (2,2)	Agr. 30, Forage Crops	3	(3,0)
Bacteriology 31, General	3	$\frac{1}{3}$ (2,4)	A. H. 32, Judging	$\frac{2}{3}$	(0,2)
			Vet. 30, Anatomy & Physiology 2	2	$\frac{2}{3}$ (2,2)
6			6 $\frac{1}{3}$		

SENIOR REQUIRED

A. H. 41, Feeds and Feeding	2	$\frac{2}{3}$ (2,2)	A. H. 40, Breeding	2	$\frac{2}{3}$ (2,2)
A. H. 43, Animal Production	2	$\frac{2}{3}$ (2,2)	A. H. 42, Pork & Sheep Prod. 2	2	$\frac{2}{3}$ (2,2)
A. H. 45, Adv. Stock Judging	2	$\frac{2}{3}$ (2,2)	Poultry Production	2	$\frac{2}{3}$ (2,2)
8			8		

I.—(c) AGRICULTURAL CHEMISTRY**JUNIOR REQUIRED****First Semester**

Bacteriology 31, General	3 $\frac{1}{3}$ (2,4)
Chemistry 25, Organic	3 $\frac{2}{3}$ (3,2)
Geol. 33, Mineralogy	2 $\frac{2}{3}$ (2,2)

 9 $\frac{2}{3}$
Second Semester

Chem. 26, Organic	3 $\frac{2}{3}$ (2,2)
Geol. 34, Mineralogy	2 $\frac{2}{3}$ (2,2)

 6 $\frac{1}{3}$
SENIOR REQUIRED

Chem. 41, Adv. Inorganic	2 (2,0)	Chem. 42, Adv. Inorganic	2 (2,0)
Chem. 43, Colloids	2 (2,0)	Chem. 44, Colloids	2 (2,0)
Chem. 45, History	2 (2,0)	Chem. 46, Stoichiometry	2 (2,0)
Chem. 47, Tech. Analysis	2 (0,6)	Chem. 50, Thesis	2 (0,6)

 8

 8
OR

Chem. 31, Physical	4 $\frac{1}{3}$ (3,4)	Chem. 32, Physical	4 $\frac{1}{3}$ (3,4)
Chem. 47, Tech. Analysis	2 $\frac{2}{3}$ (0,8)	Chem. 47 or 50, Tech. Analysis or Thesis	2 $\frac{2}{3}$ (0,8)

 7

 7
I.—(d) DAIRY HUSBANDRY**JUNIOR REQUIRED****First Semester**

A. H. 31, Prin. of Feed	2 $\frac{2}{3}$ (2,2)
Bact. 31, General	3 $\frac{1}{3}$ (2,4)

 6
Second Semester

Agr. 30, Forage Crops	3 (3,0)
Chem. 38, Dairy Chemistry	3 $\frac{1}{3}$ (2,4)
D. H. 30, Judging	$\frac{2}{3}$ (0,2)
Vet. 30, Anatomy & Physiology	2 $\frac{2}{3}$ (2,2)

 9 $\frac{2}{3}$
SENIOR REQUIRED

D. H. 41, Dairy Manufacturing	2 $\frac{2}{3}$ (2,2)	Bact. 40, Dairy Bact.	3 $\frac{1}{3}$ (2,4)
D. H. 43, Creamery Org. & Man.	3 (3,0)	D. H. 42, Dairy Manufacturing	3 $\frac{1}{3}$ (2,4)
D. H. 45, Management	2 $\frac{2}{3}$ (2,2)	D. H. 44, Breeding	1 $\frac{2}{3}$ (1,2)
D. H. 47, Genetics	2 $\frac{2}{3}$ (2,2)	D. H. 48, Adv. Dairy Farm.....	2 $\frac{2}{3}$ (2,2)
D. H. 51, Problems	1 (1,0)	D. H. 50, Problems	1 (1,0)

 12

 12
I.—(e) AGRICULTURAL ECONOMICS**JUNIOR REQUIRED****First Semester**

Ag. Ec. 31, Farm Management	2 $\frac{2}{3}$ (2,2)
Bact. 31, General	3 $\frac{1}{3}$ (2,4)
Eng. 40, Business Law	2

 8
Second Semester

Ag. Ec. 32, Price Economics	2 $\frac{2}{3}$ (2,2)
Ag. Ec. 34, Farm Acct.	2 $\frac{1}{3}$ (1,4)
Bot. 32, Forestry	2 $\frac{2}{3}$ (2,2)

 7 $\frac{2}{3}$

SENIOR REQUIRED

Ag. Ec. 41, Adv. Ag. Ec.	3	(3,0)	Ag. Ec. 40, Rural Sociology.....	2	$\frac{2}{3}$ (2,2)
Ag. Ec. 43, Marketing	2	$\frac{2}{3}$ (2,2)	Ag. Ec. 42, Rural Coop.	3	(3,0)
Ag. Ec. 45, Statistical Methods.....	1	$\frac{2}{3}$ (1,2)	Ag. Ec. 50, Special Problems ..	1	(1,0)
			Geol. 40, Ec. Geology	3	(3,0)

7 $\frac{1}{3}$

9 $\frac{2}{3}$

I.—(f) AGRICULTURAL EDUCATION

JUNIOR REQUIRED

A. H. 31, Prin. of Feed.....	2	$\frac{2}{3}$ (2,2)	Bot. 32, Forestry	2	$\frac{2}{3}$ (2,2)
Ed. 31, Introduction to Ag. Ed. 3	(1,6)		Ed. 32, Ed. Psych.	3	(2,3)
Hort. 31,	2	$\frac{2}{3}$ (2,2)	Farm Poultry	2	$\frac{2}{3}$ (2,2)

8 $\frac{1}{3}$

8 $\frac{1}{3}$

SENIOR REQUIRED

Ed. 41, Prin. of Vocational Ed. —	4	(1,9)	Ed. 40, Ag. Prac. Teaching.....	5	(0,15)
			Ed. 42, Ag. Course Building	3	(3,0)

8

I.—(g) HORTICULTURE

JUNIOR REQUIRED

First Semester

Agr. 32, Genetics	2	$\frac{2}{3}$ (2,2)
Bact. 31, General	3	$\frac{1}{3}$ (2,4)
Hort. 31, Fruit Growing	2	$\frac{2}{3}$ (2,2)
Z. & E. 31, Gen. & App. Ent.	2	$\frac{2}{3}$ (2,2)

Second Semester

Ag. Ec. 32, Price Economics	2	$\frac{2}{3}$ (2,2)
Bot. 30, Plant Physiology	3	$\frac{1}{3}$ (2,4)
Bot. 32, Forestry	2	$\frac{2}{3}$ (2,2)

11 $\frac{1}{3}$

8 $\frac{2}{3}$

SENIOR REQUIRED

Hort. 41, Systematic Pomology	2	$\frac{2}{3}$ (2,2)	Hort. 42, Pomology	2	$\frac{2}{3}$ (2,2)
Hort. 43, Plant Propagating	2	$\frac{2}{3}$ (2,2)	Hort. 44, Landscape Gard.	2	$\frac{1}{3}$ (2,2)
Hort. 45, Olericulture	2	$\frac{2}{3}$ (2,2)	Hort. 46, Olericulture	2	$\frac{2}{3}$ (2,2)
Hort. 51, Special Problems	1	(1,0)	Hort. 50, Special Problems	1	(1,0)

9

9

I.—(h) ZOOLOGY AND ENTOMOLOGY

JUNIOR REQUIRED

First Semester

Bact. 31	3	$\frac{1}{3}$ (2,4)
Hort. 31	2	$\frac{2}{3}$ (2,2)
Z. & E. 31, Gen'l & App.	2	$\frac{2}{3}$ (2,2)

Second Semester

Bot. 30, Plant Physiology	3	$\frac{1}{3}$ (2,4)
Bot. 32, Forestry	2	$\frac{2}{3}$ (2,2)
Z. & E. 32, Entomology	2	$\frac{2}{3}$ (2,2)

8 $\frac{2}{3}$

8 $\frac{2}{3}$

SENIOR REQUIRED

Z. & E. 41, Econ. Ent.	2	$\frac{2}{3}$ (2,2)	Z. & E. 42, Econ. Ent.	2	$\frac{2}{3}$ (2,2)
Z. & E. 43, Shade Trees & Forest Insects	3	(2,3)	Z. & E. 44, Beekeeping	2	$\frac{2}{3}$ (2,2)
Z. & E. 45, Insect Morph.	2	$\frac{2}{3}$ (2,2)	Z. & E. 46, Syst. Ent.	2	$\frac{1}{3}$ (1,4)
Z. & E. 47, An. Parasitology	2	$\frac{2}{3}$ (2,2)	Z. & E. 48, Ornithology	1	(0,3)
Z. & E. 51, Prob. & Thesis	1	(1,0)	Z. & E. 50, Problems	1	(1,0)

12

9 $\frac{2}{3}$

JUNIOR-SENIOR ELECTIVES

A major subject in any other agricultural division by getting the consent of the director of the department. (Any course is elective providing the required work has been scheduled and the student is sufficiently prepared to take the work.)

First Semester

Ag. Ec. 3, Farm Management	2	$\frac{2}{3}$ (2,2)
Agr. 53, Ag. Surv. & Drainage	2	$\frac{2}{3}$ (2,2)
Agr. 55, Farm Shops	1	$\frac{2}{3}$ (1,2)
Agr. 57, Farm Motors	2	$\frac{2}{3}$ (2,2)
A. H. 31, Prin. of Feeding	2	$\frac{2}{3}$ (2,2)
Arch. 13, Freehand Drawing		$\frac{2}{3}$ (0,2)
Arch. 15, Descript. Gen'l		$\frac{2}{3}$ (0,2)
Bact. 31, Gen'l Bact.	3	$\frac{1}{3}$ (2,4)
Bot. 11, Field Cr. Dis.	2	$\frac{2}{3}$ (2,2)
Bot. 13, Orch. & Truck Dis.	2	$\frac{2}{3}$ (2,2)
C. E. 23, Plane Surveying	1	$\frac{2}{3}$ (1,2)
Chem. 25, Organic	3	$\frac{2}{3}$ (3,2)
D. H. 17, Genetics	2	$\frac{2}{3}$ (2,2)
E. & S. 31, Gen'l Ec.	3	(3,0)
Ed. 31, Ag. Ed.	3	(1,6)
Eng.	2	(2,0)
Eng. 40, Business Law	2	(2,0)
Military Science 31-41	3	(2,3)
Modern Language	3	(3,0)
Vet. 41, Dis. of An.	2	$\frac{2}{3}$ (2,2)
Z. & E. 31, Gen'l & App. Ent.	2	$\frac{2}{3}$ (2,2)

Second Semester

Ag. Ec. 32, Price Economics	2	$\frac{2}{3}$ (2,2)
Agr. 31, Fert. & Manure	2	(2,0)
Agr. 46, Farm Buildings	2	$\frac{2}{3}$ (2,2)
Arch. 14, Freehand Drawing	1	$\frac{1}{3}$ (1,4)
Arch. 16, Sh., Shad. & Pers.		$\frac{2}{3}$ (0,2)
Bact. 40, Dairy Bact.	3	$\frac{1}{3}$ (2,4)
Bact. 42, San. Bact.	3	$\frac{1}{3}$ (2,4)
Bact. 44, Soils Bact.	3	$\frac{1}{3}$ (2,4)
Bot. 30, Plant Phys.	3	$\frac{1}{3}$ (2,4)
Chem. 36, Organic	3	$\frac{2}{3}$ (3,2)
Chem. 38, Dairy Chem.	3	$\frac{1}{3}$ (2,4)
Chem. 56, Chem of Feeds & Feeding	3	$\frac{1}{3}$ (2,4)
D. H. 32, Judging		$\frac{2}{3}$ (0,2)
Ed. 32, Ed. Psych.	3	(2,3)
Eng.	2	(2,0)
Farm Acct.	2	$\frac{1}{3}$ (1,1)
Farm Poultry	2	$\frac{2}{3}$ (2,2)
Geol. 42, Meteorology	2	(2,0)
Military Science 32-42	3	(2,3)
Modern Language	3	(3,0)
Vet. 42,	2	$\frac{2}{3}$ (2,2)
Z. & E. 32, Entomology	2	$\frac{2}{3}$ (2,2)

II.—ARCHITECTURE

Architecture, always ranked as a fine art, is the oldest of the constructive sciences. It deals principally with the design of buildings, their sites and presentation, their construction, decoration and equipment. It is more circumscribed by utilitarian and technical conditions than any other of the fine arts, and in order to be successful it must be both practical and artistic.

Architectural design is the principal subject and much time is given to it. In this subject students in the drafting room, work out designs for buildings ranging from small structures to large public buildings and groups of buildings. Occasionally, a "sketch" problem, which has to be completed the same day, is given, but usually the problems require from three to six weeks for their completion. Individual criticism is given by the instructor during the progress of the problem and upon completion the drawings are hung up, criticized, judged and graded by members of the faculty. Thus, each student may profit by the experiences of others. The aim throughout this course is to develop imagination, creative power, ability to work out the organism of a building and skill in the clear and artistic presentation of the drawings.

History of architecture is also of great importance in this connection, for the architect must know the experiences and inspirations of the past, its success and failures, that he may better live, think and build in terms of the present. The courses in freehand drawing and historic ornament are given not only for training in draftsmanship, but for creating effective work.

Strong courses in the constructional or engineering side of the profession, such as mathematics, mechanics, building construction, structural or working drawings and specifications, are given.

II.—ARCHITECTURE

FRESHMAN YEAR

First Semester

Arch. 11, Elements of Arch.	1 $\frac{1}{3}$ (0,4)
Arch. 15, Descriptive Geom.	$\frac{2}{3}$ (0,2)
Arch. 13, Freehand Drawing	$\frac{2}{3}$ (0,2)
English 11, Comp. and Am. Lit.	2 (2,0)
French 11,	3 (3,0)
Library 11,* How to Use	R
Math. 11, Trigonometry	5 (5,0)
Military Science 11,	1 (0,3)
Physics 11,	4 (3,2)
Phys. Ed. 11,	$\frac{2}{3}$ (0,2).

18

Second Semester

Arch. 12, Arch. Design	1 $\frac{1}{3}$ (0,4)
Arch. 14, Freehand Drawing	1 $\frac{1}{3}$ (0,4)
Arch. 16, Sh. Shad. & Persp.	$\frac{2}{3}$ (0,2)
English 12, Comp. & Lit.	2 (2,0)
French 12,	3 (3,0)
Math. 12 Analytics	5 (5,0)
Military Science 12,	1 $\frac{2}{3}$ (1,2)
Physics 12	4 (3,2)
Phys. Ed. 12,	$\frac{2}{3}$ (0,2)

19 $\frac{2}{3}$

SOPHOMORE YEAR

Arch. 21, Arch. Design	4 $\frac{2}{3}$ (0,14)
Arch. 23, Cast Drawing	1 (0,3)
Arch. 25, Hist. of Arch.	3 (3,0)
French 21,	3 (3,0)
History 21, Civilization	2 (2,0)
Math. 21, Dif. Calculus	5 (5,0)
Military Science 21,	1 (0,3)
Arch. 22, Arch. Design	4 $\frac{2}{3}$ (0,14)
Arch. 24, Cast Drawing	1 (0,3)
Arch. 26, Hist. of Arch.	3 (3,0)
French 22,	3 (3,0)
History 22, Civilization	2 (2,0)
Math. 22, I. Calculus	5 (5,0)
Military Science 22,	1 $\frac{2}{3}$ (0,2)

19 $\frac{2}{3}$ 20 $\frac{1}{3}$

Arch. 28, Summer Work.....4 weeks

JUNIOR YEAR

Arch. 31, Arch. Design	4 $\frac{2}{3}$ (0,14)
Arch. 33, Cast Drawing	$\frac{2}{3}$ (0,2)
Arch. 35, Hist. of Art	2 (2,0)
Arch. 37, Bldg. Const.	2 $\frac{2}{3}$ (2,2)
Arch. 39, Historic Ornament	$\frac{2}{3}$ (0,2)
Eng. 31, Public Speaking	2 (2,0)
Electives	3
M. E. 31, Mechanics	3 (3,0)
Military Science 33,	1 (0,3)
Arch. 32, Arch. Design	4 $\frac{2}{3}$ (0,16)
Arch. 34, Cast Drawing	$\frac{2}{3}$ (0,2)
Arch. 38, Bldg. Construction	2 $\frac{2}{3}$ (2,2)
C. E. 34, Graphic Statics	1 $\frac{2}{3}$ (1,2)
Eng. 32, Business Law	2 (2,0)
M. E. 32, Mechanics	3 (3,0)
Military Science, 34,	1 (0,3)
Electives	3

19 $\frac{2}{3}$ 19 $\frac{2}{3}$

Arch. 30, Summer Work4 weeks

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

SENIOR YEAR

Arch. 41, Arch. Design	5 $\frac{1}{3}$ (0,16)	Arch. 42, Arch. Design	4 $\frac{1}{3}$ (0,13)
Arch. 43, Bldg. Const.	3 (3,0)	Arch. 40, Life Drawing	$\frac{2}{3}$ (0,2)
Arch. 45, Struct. Design	2 (0,6)	Arch. 44, Bldg. Const.	3 (3,0)
Arch. 47, Mech. Plant.....	2 (2,0)	Arch. 46, Struct. Design	3 $\frac{1}{3}$ (0,10)
C. E. 47, Reenforced Conc.	2 (2,0)	Arch. 48, Profess. Prac.	1 (1,0)
English	2 (2,0)	Electives	3
Military Science, 43	1 (0,3)	E. & S. 42, Sociology	2 (2,0)
Electives	3	E. & S. 41, Economics	2 (2,0)
		Military Science, 44	1 (0,3)
	20 $\frac{1}{3}$		20 $\frac{1}{3}$

III.—ARTS AND SCIENCE

This course is planned to meet the needs of those students who for any reason desire general training in the natural and social sciences. It is particularly recommended for men preparing for medicine, law, teaching, and scientific investigation. It is designed to provide the maximum of adaptability to individual requirements.

Entrance.—Candidates for the B. S. degree in this course must present 15 standard high school units for entrance, divided as follows: English 3 units, mathematics 2.5 units, history 1 unit, science 1 unit, and one foreign language 2 units. The remaining 5.5 units may be chosen at will with regard to subjects. Candidates not presenting 2 units in one foreign language may, however, be entered upon condition of successful completion of two years of one language during his college course, provided he meets the other entrance requirements and presents a total of 15 units.

III.—ARTS AND SCIENCE
FRESHMAN YEAR

First Semester		Second Semester	
English 11, Comp. and Am. Lit	2 (2,0)	Botany 10, General	3 $\frac{2}{3}$ (3,2)
History 13, Pol. Science	2 (2,0)	English 12, Comp. & Am. Lit.	2 (2,0)
Library 11,* How to Use	R	History 14, Am. Ec. Hist.	2 (2,0)
Modern Language**		Modern Language**	
and	6*** (6,0)	and	6*** (6,0)
Mathematics 17,		Mathematics 18,	
Military Science 11,	1 (0,3)	Military Science 12,	1 $\frac{2}{3}$ (1,2)
Phys. Ed. 11,	$\frac{2}{3}$ (0,2)	Phys. Ed. 12,	$\frac{2}{3}$ (0,2)
Physics 13	4 (3,2)	Physics 11,	4 (3,2)
Z. & E. 11, Zoology	3 $\frac{2}{3}$ (3,2)		
	19 $\frac{1}{3}$ *		20

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

**Subject to be chosen with advice of advisor for arts and science department.

***In lieu of language and mathematics 17 and 18, a student may choose mathematics 11 and 12, and 4 credit of approved elective, total 6 cr. hrs.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

SOPHOMORE YEAR

Chem. 11,	3 $\frac{2}{3}$ (3,2)	Chemistry 12,	3 $\frac{2}{3}$ (3,2)
English 21, Lit. & Adv. Comp.	2 (2,0)	English 22, Lit. & Adv. Comp. 2	(2,0)
Geology 23,		History 22, Civilization	2 (3,0)
or	3 (3,0)	Modern Language (Cont.)**	
Modern Language**		or	3 (3,0)
History 21, Civilization	3 (3,0)	A Natural Science**	
Military Science 21,	1 (0,3)	Military Science 22,	1 $\frac{2}{3}$ (1,2)
12 $\frac{2}{3}$		13 $\frac{1}{3}$	

Electives chosen from group 1 and 2 to complete eighteen credit hours for each semester.

JUNIOR YEAR

English 31, Public Sp.	2 (2,0)	English	2 (2,0)
E & S. Gen'l. Psych	3 (2,2)	E. & S., Psychology	3 (2,2)
Military Science, 33	1 (0,3)	Military Science 34,	1 (0,3)
Free elective	3	Free Elective	3

Electives chosen from group 1 and 2 to complete 18 credit hours for each semester, but all of work may not be chosen from one group.

SENIOR REQUIRED

E. & S. 41, El. Economics	2 (2,0)	E. & S. 42, El. Sociology	2 (2,0)
Military Science, 43,	1 (0,3)	Military Science 44,	1 (0,3)
Free Elective	5	Free Electives	5

A group of coordinate studies to be approved by the director of the Arts and Science department to total not less than ten credit hours a semester.

Group 1.—All courses offered by the following departments or divisions; Agricultural Economics, Economics and Sociology, Education, English History, and Modern Languages.

Group 2.—All courses offered by the following departments or divisions: Botany and Bacteriology, Chemistry, Geology and Mineralogy, Mathematics, Physics, and Zoology and Entomology.

Additional Requirements

For graduation in this course two years of one foreign language must be successfully completed, either in a standard high school or in college.

Not more than 22 semester credit hours of work may be taken in one semester.

Students in this course will meet the Director of the Arts and Science Department or his representative for advice and assistance.

IV.—CHEMISTRY

This course is intended to prepare the student to engage in manufacturing operations involving a knowledge of chemistry, or for employment as chemist in commercial, or fertilizer inspection, or food and feeding-stuff inspection laboratories, and for experiment station or U. S. Government service. A student who has satisfactorily completed this course will also be well equipped to teach elementary chemistry, and to pursue advanced work in chemistry.

Beginning with the junior year, elections are allowed to some extent to enable the student to best fit himself for one of the above lines of work by pursuing the subject in the direction of chemical engineering, organic, physical, analytical and sanitary chemistry. The advances in all branches of chemistry have made specialization to some extent necessary, whether the student expects to enter any of the various lines of work open to a graduate of a thorough course in chemistry, or to pursue graduate work. For the latter group, two years of a modern language should be included in the electives chosen as this is a common prerequisite for such graduate work at most universities.

Subjects other than those listed may be elected with the consent of the director, provided the student has a valid reason for taking any such subject.

IV.—CHEMISTRY

FRESHMAN YEAR

Chem. 11, General	3 $\frac{2}{3}$ (3,2)	Chem. 12, General	3 $\frac{2}{3}$ (3,2)
English 11, Comp. and Am. Lit.	2 (2,0)	English 12, Comp. & Am. Lit. 2	(2,0)
Hist. 13, Political Science	2 (2,0)	History 14, Am. Ec. Hist.	2 (2,0)
Library 11,* How to Use	R	Math. 12, Analytics	5 (5,0)
Math. 11, Trigonometry	5 (5,0)	Military Science 12,	1 $\frac{2}{3}$ (1,2)
Military Sci. 11	1 (0,3)	Phys. Ed. 12,	2 $\frac{2}{3}$ (0,2)
Phys. Ed. 11	2 $\frac{2}{3}$ (0,2)	Physics 14, General	4 (3,2)
Physics 13, General	4 (3,2)		

18 $\frac{1}{3}$

19

SOPHOMORE YEAR

Chem. 23, Qualitative	4 $\frac{2}{3}$ (2,8)	Chem. 24, Quantitative	4 $\frac{2}{3}$ (2,8)
Chem. 25, Organic	3 $\frac{2}{3}$ (3,2)	Chem. 26, Organic	3 $\frac{2}{3}$ (3,2)
Drawing 11, Freehand	2 $\frac{2}{3}$ (0,2)	Drawing 12, Freehand	2 $\frac{2}{3}$ (0,2)
Drawing 13, Mechanical	2 $\frac{2}{3}$ (0,2)	Drawing 14, Mechanical	2 $\frac{2}{3}$ (0,2)
English 21, Lit.	2 (2,0)	English 22,	2 (2,0)
Math. 21, D. Calculus	5 (5,0)	Math. 22, I. Calculus	5 (5,0)
Military Science 21	1 (0,3)	Military Sci. 22	1 $\frac{2}{3}$ (1,2)

17 $\frac{2}{3}$ 18 $\frac{1}{3}$

JUNIOR YEAR

Chem. 31, Physical	4 $\frac{1}{3}$ (3,4)	Chem. 32, Physical	4 $\frac{1}{3}$ (3,4)
Chem. 33, Quantitative	1 $\frac{1}{3}$ (0,4)	E. & S. 42, Sociology	2 (2,0)
Chem. 35, Organic	2 $\frac{2}{3}$ (2,2)	English 41, Bus. Law	2 (2,0)
E. & S. 41, Economics	2 (2,0)	Geol. 34, Mineralogy	2 $\frac{2}{3}$ (2,2)
English 31, Public Speaking	2 (2,0)	Military Science, 34,	1 (0,3)
Geol. 33, Mineralogy	2 $\frac{2}{3}$ (2,0)	Electives	7
Military Science, 33	1 (0,3)		
Electives	3		

19

19

JUNIOR ELECTIVE SUBJECTS

French	3 (3,0)	Chem. 34, Gas Analysis	2 $\frac{2}{3}$ (0,2)
German	3 (3,0)	Chem. 36, Organic	2 $\frac{2}{3}$ (2,2)
Military Science	3 (2,3)	French	3 (3,0)
		German	3 (3,0)
		Military Science	3 (2,3)

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

V.—CIVIL ENGINEERING

This course is intended to prepare young men for entrance upon professional practice in some of the many branches of civil engineering, and also to meet the needs of those who, having been engaged in engineering work without a course of instruction, desire to equip themselves for more successful competition with those who have had such instruction.

In connection with the technical studies, liberal training is given in English, history, economics, pure mathematics, and the physical sciences. The course will also be found to embrace a considerable amount of drawing, shop work, and short courses in electrical engineering and mechanical engineering.

The distinctive work pursued by students in this course includes the field and office work of surveying and leveling; topographic surveying and drafting; the location and construction of railroads and highways, bridges, and other structures in connection therewith; involving investigation as to the strength of the materials of construction and the theories involved in the use thereof; masonry construction; foundations on land and under water; a particular study of highway engineering, including a laboratory course covering all the standard tests of highway material, both bituminous and non-bituminous; municipal and sanitary engineering, including water-supply, sewerage and drainage; and a brief study of engineering law including contracts and specifications. Actual design, as well as analytic investigation, is given in all cases.

A summer surveying camp of two weeks is held between the sophomore and junior years.

V.—CIVIL ENGINEERING†

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	$\frac{2}{3}$ (0,2)
Drawing 13, Mechanical	$\frac{2}{3}$ (0,2)
English 11, 'Comp. & Am. Lit.	2 (2,0)
History 13, Political Science	2 (2,0)
Library 11,* How to Use	R
Math. 11, Trigonometry	5 (5,0)
M. E. 13, Forge	$\frac{2}{3}$ (0,2)
M. E. 17, Woodwork	$\frac{2}{3}$ (0,2)
Military Sci. 11,	1 (0,3)
Phys. Ed. 11	$\frac{2}{3}$ (0,2)
Physics 11, General	4 (3,2)

Second Semester

Drawing 12, Freehand	$\frac{2}{3}$ (0,2)
Drawing 14, Mechanical	$\frac{2}{3}$ (0,2)
English 12, Comp. & Am. Lit. 2 ..	(2,0)
History 14, Am. Ec. Hist.	2 (2,0)
Math. 12, Analytics	5 (5,0)
M. E. 14, Forge	$\frac{2}{3}$ (0,2)
M. E. 18, Woodwork	$\frac{2}{3}$ (0,2)
Military Sci. 12,	1 $\frac{2}{3}$ (0,2)
Phys. Education 12	$\frac{2}{3}$ (0,2)
Physics 12, General	4 (3,2)

17 $\frac{1}{2}$

18

SOPHOMORE YEAR

C. E. 21, Surveying	3 $\frac{1}{3}$ (2,4)	C. E. 22, Surveying	3 $\frac{1}{3}$ (2,4)
Chem. 11, General	3 $\frac{2}{3}$ (3,2)	Chem. 12, General	3 $\frac{2}{3}$ (3,2)
Drawing 25, Mechanical	$\frac{2}{3}$ (0,2)	Drawing 26, Structural	$\frac{2}{3}$ (0,2)
English 21, Lit. & Adv. Comp.	2 (2,0)	English 22, Lit. & Adv. Comp. 2 ..	(2,0)
Math. 21, Differen. Calculus	5 (5,0)	Math. 22, Int. Caculus	5 (5,0)
Military Sci. 21,	1 (0,3)	Military Sci. 22,	1 $\frac{2}{3}$ (1,3)
Physics 23, Laboratory	1 (0,2)	Physics 24, Laboratory	1 (0,2)
Physics 25, Mech El. & Light....	2 (2,0)	Physics 26, Mech. El. & Light 2 ..	(2,0)

18 $\frac{2}{3}$ 19 $\frac{1}{3}$

JUNIOR YEAR

C. E. 31, Railroad Curves	3 (3,0)	C. E. 32, Mech. of Materials	3 (3,0)
C. E. 33, Masonry Const.	2 (2,0)	C. E. 34, Graphic Statics	1 $\frac{2}{3}$ (1,2)
English 31, Pub. Speaking	2 (2,0)	C. E. 36, Struct. Design	1 $\frac{1}{3}$ (0,4)
M. E. 31, Mechanics	3 (3,0)	E. & S. 41, Economics	2 (2,0)
M. E. 33.5, Machine Shop	$\frac{2}{3}$ (0,2)	English 40, Business Law	2 (2,0)
M. E. 37, Mech. Engr.	3 (3,0)	Geology 31, Engineering	2 (2,0)
M. E. 37.5, Lab.	$\frac{2}{3}$ (0,2)	M. E. 38, Mech. Engr.	3 (3,0)
Military Science, 33,	1 (0,3)	M. E. 38.5, Lab.	$\frac{2}{3}$ (0,2)
Physics 33, Astronomy	2 (2,0)	Military Science 34,	1 (0,3)
Electives	3	Electives	3

20 $\frac{1}{3}$ 19 $\frac{2}{3}$

SENIOR YEAR

C. E. 41, Roads & Pavements 3 ..	(3,0)	C. E. 40, Bridge Design	4 (2,6)
C. E. 43, Road Mat. & Test.	1 (0,3)	C. E. 42, Road Lab.	1 (0,3)
C. E. 45, Reinf. Concrete	2 $\frac{2}{3}$ (2,2)	C. E. 44, Water Supply	2 (2,0)
C. E. 49, Hydraulics	3 (3,0)	C. E. 46, Sewerage	3 (3,0)
C. E. 51, Thesis	$\frac{2}{3}$ (0,2)	C. E. 48, Engr. Investigation	$\frac{2}{3}$ (0,2)
E. E. 51, Elements of E. E.	2 $\frac{2}{3}$ (2,2)	C. E. 50, Thesis	$\frac{2}{3}$ (0,2)
Military Science 43,	(0,3)	E. & S. 42, Sociology	2 (2,0)
Electives	3	Military Science 44,	1 (0,3)
		Electives	5

19

19 $\frac{1}{2}$

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

†A summer camp will be required of all students in civil engineering who have not had acceptable practical experience.

VI.—ELECTRICAL ENGINEERING

Electrical engineering is developing so rapidly and is being applied in such widely different fields that it is impossible for any college course to cover it adequately. There are, however, certain fundamental laws which underlie all the important applications of electricity. In the careful study of these laws and a few of the more fundamental applications, this course attempts to lay the foundation on which the student may rapidly build his professional career in any branch of electrical engineering.

The course includes the study of those subjects which form a necessary foundation for the study of electrical theory and practice; sufficient drawing and shop work to develop the co-ordination between mind and hand, and at the same time give the student some idea of the possibilities of engineering materials; and other subjects which broaden his intellectual growth. He is encouraged to take an interest in public affairs, to give time to more extensive and diversified reading, and to enter into various student activities.

VI.—ELECTRICAL ENGINEERING

FRESHMAN YEAR

First Semester			Second Semester		
Drawing 11, Freehand	$\frac{2}{3}$	(0,2)	Drawing 12, Freehand	$\frac{2}{3}$	(0,2)
Drawing 13, Mechanical	$\frac{2}{3}$	(0,2)	Drawing 14, Mechanical	$\frac{2}{3}$	(0,2)
English 11, Comp. and Am. Lit.	2	(2,0)	English 12, Comp. & Am. Lit.	2	(2,0)
History 13, Political Sci.	2	(2,0)	History 14, Am. Ec. Hist.	2	(2,0)
Library 11,* How to Use	R		Math. 12, Analytics	5	(5,0)
Math. 11, Trigonometry	5	(5,0)	M. E. 14, Forge	$\frac{2}{3}$	(0,2)
M. E. 13, Forge	$\frac{2}{3}$	(0,2)	M. E. 18, Woodwork	$\frac{2}{3}$	(0,2)
M. E. 17, Woodwork	$\frac{2}{3}$	(0,2)	Military Science 12.....	1	$\frac{2}{3}$ (1,2)
Military Science 11	1	(0,3)	Phys. Ed. 12	$\frac{2}{3}$	(0,2)
Phys. Ed. 11	$\frac{2}{3}$	(0,2)	Physics 12, General	4	(3,2)
Physics 11, General	4	(3,2)			
17 $\frac{1}{3}$			18		

SOPHOMORE YEAR

Chem. 11, General	3 $\frac{2}{3}$	(3,2)	Chem. 12, General	3	$\frac{2}{3}$ (3,2)
Drawing 25, Mechanical	$\frac{2}{3}$	(0,2)	Drawing 28, Mechanical	$\frac{2}{3}$	(0,2)
C. E. 23, Surveying	1 $\frac{2}{3}$	(1,2)	E. & S. 41, Economics	2	(2,0)
English 21, Lit. & Adv. Comp.	2	(2,0)	English 22, Lit. & Adv. C.	2	(2,0)
Math. 21, Differen. Calculus	5	(5,0)	Math. 22, Int. Calculus	5	(5,0)
M. E. 21, Woodwork	$\frac{2}{3}$	(0,2)	M. E. 22, Foundry	$\frac{2}{3}$	(0,2)
Military Science 21	1	(0,3)	Military Science 22	1	$\frac{2}{3}$ (1,3)
Physics 21, Mechan. & Light	3	(3,0)	Physics 22, Mechan. & Light	3	(3,0)
Physics 23, Lab	1	(0,2)	Physics 24, Lab.	1	(0,2)
18 $\frac{2}{3}$			19 $\frac{2}{3}$		

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

JUNIOR YEAR

Drawing 31, Machine Design .....1	(0,3)	Drawing 32, Mech. Design .....1	(0,3)
E. E. 31, D. C. Machinery .....5	(5,0)	E. E. 32, A. C. Circuits .....5	(5,0)
E. E. 33, Elec. Measurements .....1	(0,3)	E. E. 34, Elec. Measurements 1	(0,3)
M. E. 31, Mechanics .....3	(3,0)	M. E. 30, Mech. Lab.	$\frac{2}{3}$ (0,2)
M. E. 33.5, Machine Shop .....1	$\frac{1}{3}$ (0,4)	M. E. 32, Mechanics .....3	(3,0)
M. E. 35, Mech. Engr.	3 (3,0)	M. E. 34.5, Machine Shop .....1	$\frac{1}{3}$ (0,4)
M. E. 39, Mech. Lab.	$\frac{2}{3}$ (0,2)	M. E. 36, Mech. Engr.	3 (3,0)
Military Science 33.....1	(0,3)	Military Science 34 .....1	(0,3)
Electives .....3		Electives .....3	
19		19	

SENIOR YEAR

E. E. 41, A. C. Machinery .....3	(3,0)	C. E. 52, Hydraulics .....2	(2,0)
E. E. 43, Elec. Circuits .....2	(2,0)	E. E. 42, A. C. Machinery .....3	(3,0)
E. E. 45, Dynamo Lab.	1 $\frac{1}{3}$ (0,4)	E. E. 44, Power Trans.	2 (2,0)
E. E. 47, Elec. Design .....2	$\frac{2}{3}$ (0,2)	E. E. 46, Dynamo Lab.	1 $\frac{1}{3}$ (0,4)
Eng. 31, Pub. Speaking .....2	(2,0)	E. E. 48, Elec. Design .....2	$\frac{2}{3}$ (0,2)
M. E. 41, Mech. Engr.	3 (3,0)	E. & S. 42, Sociology .....2	(2,0)
M. E. 45, Mech. Lab.	$\frac{2}{3}$ (0,2)	English 40, Bus. Law .....2	(2,0)
M. E. 51, Mech. of Mat.	3 (3,0)	Military Science 44 .....1	(0,3)
Military Science 43 .....1	(0,3)	Electives .....5	
Electives .....3			
19 $\frac{2}{3}$		19	

ELECTIVES

Chemistry
Civil Engineering
Electrical Engineering
English
Military Science

Mechanical Engineering
Modern Languages
Textiles
Psychology
Physics
Music

VII.—INDUSTRIAL EDUCATION

The demand for men to serve as teachers of shop subjects, manual training, related shop subjects, home mechanics and manual arts, as well as local supervisors in industrial communities, has been responsible for the inauguration of this course. Men who completed this course have the professional qualifications to meet the standards of the vocational teachers. Students who take this course should have experience in a trade before entering and are encouraged to secure industrial employment

during their vacation. Machine shops, garages, construction work, electrical work and other such trades offer opportunities for this practical experience.

VII.—INDUSTRIAL EDUCATION

FRESHMAN YEAR

First Semester

Drawing 11-13	1 $\frac{1}{3}$ (0,4)
English 11, Comp. & Lit.	2 (2,0)
History 13, Pol. Science	2 (2,0)
Library 11*, How to Use	R
Math. 11	5 (5,0)
M. E. 11, Forge	1 $\frac{1}{3}$ (0,4)
Military Science 11	1 (0,3)
Phys. Ed. 11	$\frac{2}{3}$ (0,2)
Physics 11	4 (3,2)

17 $\frac{1}{3}$

Second Semester

Drawing 12-14	1 $\frac{1}{3}$ (0,4)
English 12, Comp. & Lit.	2 (2,0)
History 14, Am. Ec.	2 (2,0)
Math. 12	5 (5,0)
M. E. 16, Woodwork	1 $\frac{1}{3}$ (0,4)
Military Science 12	1 $\frac{2}{3}$ (1,2)
Phys. Ed. 12	$\frac{2}{3}$ (0,2)
Physics 12	4 (3,2)

18

SOPHOMORE YEAR

Chem. 11, General	3 $\frac{2}{3}$ (3,2)	Chem. 12, General	3 $\frac{2}{3}$ (3,2)
C. E. 21, Surveying	1 $\frac{2}{3}$ (1,2)	Drawing 28, Mechanical	$\frac{2}{3}$ (0,2)
Drawing 25, Mechanical	$\frac{2}{3}$ (0,2)	E. & S. 41, Econ.	1 $\frac{2}{3}$ (1,2)
English 21, Lit. & Adv. Comp. 2	(2,0)	English 22, Lit. & Adv. Comp. 2	(2,0)
Math. 21, D. Calculus	5 (5,0)	Math. 22, I. Calculus	5 (5,0)
M. E. 21, Woodwork	$\frac{2}{3}$ (0,2)	M. E. 22, Foundry	$\frac{2}{3}$ (0,2)
Military Science 21	1 (0,3)	Military Science 22,	1 $\frac{2}{3}$ (1,2)
Physics 21-23	3 $\frac{2}{3}$ (3,2)	Physics 22-24,	3 $\frac{2}{3}$ (3,2)

18 $\frac{1}{3}$

19

JUNIOR YEAR

English 31, Pub. Sp.	2 (2,0)	Eng. 40, Bus. Law	2 (2,0)
Ed. 33, Introduction to Ind. Ed. 2	$\frac{1}{3}$ (1,4)	Ed. 32, Educational Psychology 3	(2,3)
Geol. 31, Engineering	2 (2,0)	M. E. 32, Mechanics	3 (3,0)
M. E. 31, Mechanics	3 (3,0)	M. E. 32.5, Indus. Arts	$\frac{2}{3}$ (0,2)
M. E. 33.5, Mach. Shop	1 $\frac{1}{3}$ (0,4)	M. E. 34.5, Machine Shop	1 $\frac{1}{3}$ (0,4)
M. E. 31.5, Indus. Arts	$\frac{2}{3}$ (0,2)	Military Science 34,	1 (0,3)
Military Science 33	1 (0,3)	Physics 33, Astronomy	2 (2,0)
Electives	7	Electives	7

19 $\frac{1}{3}$

20

SENIOR YEAR

C. E. 32, Mech. of Mat.	3 (3,0)	Ed. 44, Meth. Teach. Ind. Sub. 3	(3,0)
Ed. 43	4 (0,12)	Ed. 46, Prac. Teaching	3 $\frac{1}{3}$ (0,12)
E. E. 30, Elect. Machinery	2 $\frac{2}{3}$ (2,2)	E. & S. 42, Sociology	2 (2,0)
Military Science 43	1 (0,3)	Military Science 44	1 (0,3)
Electives	10	Electives	10

20 $\frac{2}{3}$

19 $\frac{1}{3}$

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

VIII.—INDUSTRIAL EDUCATION, TEXTILE

By the enactment of the Smith-Hughes law for the promotion of vocational education, Congress has provided funds for encouraging and assisting in the development of instruction throughout the country in agriculture, home economics, and trades and industries.

This course has for its purpose the preparation of young men for positions of usefulness and responsibility in the trades and industries of the state. The course includes instruction in the fundamental principles of education, of engineering, and of the textile industry.

The prime purpose of the course is to prepare for positions as teachers of trade and industrial subjects as such and as principals of schools in mill communities as well as local supervisors of industrial education. As the textile industry is the dominant one in the state, that industry is given special prominence. The course is essentially a combination of instruction in the textile industry and the training of industrial teachers.

VIII.—INDUSTRIAL EDUCATION, TEXTILES FRESHMAN YEAR

First Semester		Second Semester	
Drawing 11, Freehand	$\frac{2}{3}$ (0,2)	Drawing 12, Freehand	$\frac{2}{3}$ (0,2)
Drawing 13, Mechanical	$\frac{2}{3}$ (0,2)	Drawing 14, Mechanical	$\frac{2}{3}$ (0,2)
English 11, Comp. and Am. Lit. ....2	(2,0)	English 12, Comp. & Am. Lit. ....2	(2,0)
History 13, Polit. Science .....2	(2,0)	History 14, Am. Ec. Hist. ....2	(2,0)
Library 11*, How to Use .....R		Math. 12, Analytics .....5	(5,0)
Math. 11, Trigonometry .....5	(5,0)	M. E. 14, Forge $\frac{2}{3}$ (0,2)	
M. E. 17, Woodwork $\frac{2}{3}$ (0,2)		Military Science 12 .....1	$\frac{2}{3}$ (1,2)
Military Science 11 .....1	(0,3)	Phys. Ed. 12 $\frac{2}{3}$ (0,2)	
Phys. Ed. 11 $\frac{2}{3}$ (0,2)		Physics 12, General .....4	(3,2)
Physics 11, General .....4	(3,2)	T. F. 12, Textiles .....1	$\frac{2}{3}$ (1,2)
Yarn Mfg. 11, Textiles .....1	$\frac{2}{3}$ (1,2)		

18 $\frac{1}{2}$

19

Summer Work4 weeks

SOPHOMORE YEAR

Chemistry 11, General .....3	$\frac{2}{3}$ (3,2)	Chem. 12, General .....3	$\frac{2}{3}$ (3,2)
Drawing 25, Mechanical $\frac{2}{3}$ (0,2)		Drawing 28, Mechanical $\frac{2}{3}$ (0,2)	
English 21, Lit & Adv. Comp. ....2	(2,0)	English 22, Lit. & Adv. Comp. 2	(2,0)
M. E. 33.5, Machine Shop .....1	$\frac{2}{3}$ (0,4)	Math. 22, I Calculus .....5	(5,0)
Math. 21, D. Calculus .....5	(5,0)	M. E. 34.5, Machine Shop .....1	$\frac{1}{2}$ (0,4)
Military Science 21 .....1	(0,3)	Military Science 22 .....1	(0,3)
T. F. 21, Fabric Const. ....2	(2,0)	T. F. 22, El. Design .....2	(2,0)
T. F. 23, Weaving $\frac{2}{3}$ (0,2)		T. F. 24, Weaving $\frac{2}{3}$ (0,2)	
Yarn Mfg. 21, Pickers .....2	$\frac{2}{3}$ (2,2)	Yarn Mfg. 22, Cards and Drawing Frames .....2	$\frac{2}{3}$ (2,2)

19

19

Summer Work4 weeks

JUNIOR YEAR

First Semester			Second Semester		
English 31	2	(2,0)	English 32	2	(2,0)
Ed. 33, Introduction	3	(1,6)	Ed. 32, Ed. Psych.	3	(2,3)
Military Science 33	1	(0,3)	M. E. 38, Mech. Eng.	3	$\frac{5}{3}$ (3,2)
T. F. 31, Dobby Design	2	(2,0)	Military Science 34	1	(0,3)
T. F. 33, Fabric Analysis	$\frac{2}{3}$	(0,2)	T. F. 32, Fabric Analysis	$\frac{2}{3}$	(0,2)
T. F. 35, Weaving	$\frac{2}{3}$	(0,2)	T. F. 36, Weaving	$\frac{2}{3}$	(0,2)
Yarn Mfg. 31	2	$\frac{2}{3}$ (2,2)	Yarn Mfg. 32	2	$\frac{2}{3}$ (2,2)
Yarn Mfg. 41, Spinning	2	$\frac{2}{3}$ (2,2)	Yarn Mfg. 42, Combers	1	$\frac{2}{3}$ (1,2)
Electives	5		Electives	4	
19 $\frac{2}{3}$			19 $\frac{1}{3}$		

JUNIOR ELECTIVES

Designing	2	Physics	3 $\frac{2}{3}$
Education	3	Spinning Project	2
Foreign Language	3	Surveying	1 $\frac{2}{3}$
Mechanics	3	Textile Chemistry	2 $\frac{2}{3}$
R. O. T. C.	3		

SENIOR YEAR

E. & S. 41, Econ.	2	(2,0)	E. & S. 42, Sociology	2	(2,0)
Ed. 43, Industrial	4	(0,8)	Ed. 44, Industrial	3	(3,0)
Military Science 43	1	(0,3)	Ed. 46, Practice Teaching	5	(0,15)
T. F. 41, Tech. Fab.	2	(2,0)	Military Science 44	1	(0,3)
T. F. 43, Weave Meth.	3	(3,0)	T. F. 41, Mill Econ.	2	(2,0)
Electives	9		Electives	8	
21			21		

SENIOR ELECTIVES

Chem. Textile	2	$\frac{2}{3}$ (2,2)	E. E. 30, Elect. Machinery	2	$\frac{2}{3}$ (2,2)
Dyeing	1	$\frac{1}{3}$ (0,1)	Language	3	(3,0)
Education			Loom Fixing	$\frac{2}{3}$	(0,2)
English	3	(3,0)	R. O. T. C.	3	
Jacq. Design	3	$\frac{1}{3}$ (2,4)	Spinning Project	2	(0,5)
			Weaving	$\frac{2}{3}$	(0,2)
			Weaving Project	2	(0,5)

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE A two hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

IX.—MECHANICAL ENGINEERING

The course in mechanical engineering is designed to give the graduate as broad a training as possible and at the same time to fit him for some specific type of work.

It embraces practically all forms of engineering which have for their objects the application of the forces of nature to the accomplishment of the processes of industry. The course is designed to give an intimate knowledge of the materials used in engineering, the laws of mechanics and the characteristics of various types of machinery.

The shop courses embrace wood work, forge work, foundry and machine work. The purpose of this instruction is not to turn out skilled workmen but to train those faculties of mind which can best be reached through the work of the hand, and at the same time, give the student a clear knowledge of the characteristics and possibilities of the materials used in engineering.

Considerable time is given to the study of the laws of the physical sciences, in such subjects as physics, chemistry, mechanics, electricity and magnetism and thermodynamics.

During the fourth year stress is laid on the application of the fundamental principles already covered so that the graduate may be able to design or manage those types of machines which ordinarily come under the supervision of the mechanical engineer.

The mechanical engineer should have a good liberal education, so in addition to the regular technical work comprehensive training is given in English, history, economics, civics and related subjects.

IX.—MECHANICAL ENGINEERING FRESHMAN YEAR

First Semester		Second Semester	
Drawing 11, Freehand	$\frac{2}{3}$ (0,2)	Drawing 12, Freehand	$\frac{2}{3}$ (0,2)
Drawing 13, Mechanical	$\frac{2}{3}$ (0,2)	Drawing 14, Mechanical	$\frac{2}{3}$ (0,2)
English 11, Comp. & Lit.	2 (2,0)	English 12, Comp. & Lit.	2 (2,0)
History 13, Pol. Science	2 (2,0)	History 14, Am. Ec.	2 (2,0)
Library 11*, How to Use	R	Math. 12, Analytics	5 (5,0)
Math 11, Trigonometry	5 (5,0)	M. E. 14, Forge	$\frac{2}{3}$ (0,2)
M. E. 13, Forge	1 $\frac{1}{3}$ (0,4)	M. E. 18, Woodwork	1 $\frac{2}{3}$ (0,4)
M. E. 17, Woodwork	$\frac{2}{3}$ (0,2)	Military Science 12	1 $\frac{2}{3}$ (1,2)
Military Science 11	1 (0,3)	Phys. Ed. 12	$\frac{2}{3}$ (0,2)
Phys. Ed. 11	$\frac{2}{3}$ (0,2)	Physics 12, General	4 (3,2)
Physics 11, General	4 (3,2)		

 17 $\frac{1}{3}$

 20

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—A two-hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

SOPHOMORE YEAR

C. E. 23, Surveying	1 $\frac{1}{3}$ (1,2)	Chem. 12, General	3 $\frac{2}{3}$ (3,2)
Chem. 11, General	3 $\frac{2}{3}$ (3,2)	Drawing 28, Mechanical	$\frac{2}{3}$ (0,2)
Drawing 25, Mechanical	$\frac{2}{3}$ (0,2)	E. & S. 42, Economics	2 (2,0)
English 21, Lit. & Adv. Comp. 2	(2,0)	English 22, Lit. & Adv. Comp. 2	(2,0)
Math. 21, D. Calculus	5 (5,0)	Math. 22, Int. Calculus	5 (5,0)
M. E. 21, Woodwork	$\frac{2}{3}$ (0,2)	M. E. 22, Foundry	$\frac{2}{3}$ (0,2)
Military Science 21	1 (0,3)	Military Science 22	1 $\frac{2}{3}$ (1,2)
Physics 21	3 (3,0)	Physics 22	3 (3,0)
Physics 23, Lab	$\frac{2}{3}$ (0,2)	Physics 24, Lab.	1 (0,2)

18 $\frac{1}{2}$ 19 $\frac{2}{3}$ **JUNIOR YEAR**

Drawing 31, Machine Design	1 (0,3)	Drawing 32, Mach. Design	1 (0,3)
E. E. 31, D. C. Machinery	5 (5,0)	E. E. 32, A. C. Machinery	5 (5,0)
E. E. 33, Elec. Measurement	1 (0,3)	E. E. 34, Elec. Measurement	1 (0,3)
M. E. 31, Mechanics	3 (3,0)	M. E. 30, Mech. Lab.	$\frac{2}{3}$ (0,2)
M. E. 33, Machine Shop	1 $\frac{1}{3}$ (0,4)	M. E. 32, Mechanics	3 (3,0)
M. E. 35, Mech. Engr.	3 (3,0)	M. E. 34, Mach. Shop	1 $\frac{1}{3}$ (0,4)
M. E. 39, Lab.	$\frac{2}{3}$ (0,2)	M. E. 36, Mech. Engr.	3 (3,0)
Military Science 33	1 (0,3)	Military Science 34	1 (0,3)
Electives	3	Electives	3

19

19

SENIOR YEAR

E. E. 35, Dynamo Lab.	$\frac{2}{3}$ (0,2)	C. E. 52, Hydraulics	2 (2,0)
E. E. 53, A. C. Machinery	3 (3,0)	E. E. 36, Dynamo Lab.	$\frac{2}{3}$ (0,2)
English 31, Public Speaking	2 (2,0)	E. & S. 42, Sociology	2 (2,0)
M. E. 43, Mech. Lab.	1 $\frac{1}{3}$ (0,4)	English 40, Business Law	2 (2,0)
M. E. 47, Power Plants	3 (3,0)	M. E. 42, Power Plants	3 (3,0)
M. E. 49, Heat & Ventilation	2 (2,0)	M. E. 44, Mech. Lab.	1 $\frac{1}{3}$ (0,4)
M. E. 53, Design	$\frac{2}{3}$ (0,2)	M. E. 46, Gas Engines	$\frac{2}{3}$ (0,2)
M. E. 51, Mech. of Materials	3 (3,0)	M. E. 54, Design	$\frac{2}{3}$ (0,2)
Military Science 43	1 (0,3)	Military Science 44	1 (0,3)
Electives	3	Electives	5

19 $\frac{2}{3}$ 18 $\frac{1}{2}$

Electives should be selected from the following group. Other electives may be chosen with the approval of the director.

ELECTIVES

Chemistry	Modern Language
Civil Engineering	Music
Electrical Engineering	Psychology
English	Textiles
Mechanical Engineering	Physics
Military Science	

X.—PRE-MEDICAL

This course is planned for those students who wish to complete in two sessions the minimum requirements for admission to a standard medical college.

The work is composed largely of the coordinated courses in the biological and physical sciences. Elections under the advice of the Director of Arts and Science Department may be made. At least 17 hours work is required each semester.

Students who pursue this course for three years and graduate from a standard medical college may be awarded the B. S. degree in Arts and Science.

X.—PRE-MEDICAL

FIRST YEAR

First Semester		Second Semester	
Chem. 11, General	3 $\frac{2}{3}$ (3,2)	Botany 10, General	3 $\frac{2}{3}$ (3,2)
English 11, Comp. and Am. Lit.	2 (2,0)	Chem. 12, General Chemistry.....	3 $\frac{2}{3}$ (3,2)
History 11, Political Science	3 (3,0)	Eng. 12, Comp and Am. Lit.	2 (2,0)
Library 11*, How to Use	R	Hist. 14, Am. Ec. History	2 (2,0)
Math. 17, Math. for Science	3 (3,0)	Math. 18, Math. for Sciences.....	3 (3,0)
Military Science 11	1 (0,3)	Military Science 12	1 $\frac{2}{3}$ (1,2)
Mod. Language	3 (3,0)	Modern Language	3 (3,0)
Phys. Ed. 11	$\frac{2}{3}$ (0,2)	Phys. Ed. 12,	$\frac{2}{3}$ (0,2)
Z. & E. 11, Zool.	3 $\frac{2}{3}$ (3,2)		
	19		19 $\frac{2}{3}$

SECOND YEAR

Chem. 25, Organic	3 $\frac{2}{3}$ (3,2)	Chem. 26, Organic	3 $\frac{2}{3}$ (3,2)
E. & S. 31, General Psych	3 (2,2)	E. & S. 32, General Psych.	3 (2,2)
Eng. 21, Lit and Adv. Comp.	2 (2,0)	Eng. 22, Lit. & Adv. Comp.	2 (2,0)
Military Science 21.....	1 (0,3)	Military Science 22,	1 $\frac{2}{3}$ (1,2)
Modern Language (Cont.)	3 (3,0)	Modern Language (Cont.)	3 (3,0)
Physics 13,	4 (3,2)	Physics 14,	4 (3,2)
	16 $\frac{2}{3}$		16 $\frac{2}{3}$

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

NOTE—Approved electives to complete 18 credit hours each semester. Total for certificate 74 semester credit hours.

XI.—TEXTILES

The course in textiles is designed to give the student sound training, both theoretical and practical, in the sciences upon which manufacturing processes are based. In formulating the curriculum the several phases of the textile industry were considered. Successful practice in the industry is dependent upon

the understanding of these principles and their practical application.

The first year of the course introduces the student to the textile industry and gives some instruction in certain of its phases and at the same time gives him fundamental engineering subjects as well as those of general educational value. The practical work is carried on for the purpose of developing in the student habits of accurate observation and some skill in manipulation, supplementing the theoretical work. In this work special consideration is given to economy of time, precision of results, and attention to details, as well as to methods of fundamental importance.

This course does not necessarily fit one for immediate entrance to an executive position in a mill, but the graduate is in possession of such information, and has acquired such knowledge and experience that he may look forward to a successful career provided he has the necessary energy, application, and tact.

Students who take this course are encouraged to work in the industry during their vacation periods. Every one is required to work at least four weeks between the freshman and sophomore years and at least four weeks between the sophomore and junior years in a textile plant. Students who have had experience such as may be acceptable to the head of the textile department may be excused from this requirement.

TEXTILES†

FRESHMAN YEAR

First Semester			Second Semester		
Drawing 11, Freehand	$\frac{2}{3}$	(0,2)	Drawing 12, Freehand	$\frac{2}{3}$	(0,2)
Drawing 13, Mechanical	$\frac{2}{3}$	(0,2)	Drawing 14, Mechanical	$\frac{2}{3}$	(0,2)
English 11, Comp. & Am. Lit.	2	(2,0)	English 12, Comp & Am. Lit.	2	(2,0)
History 13, Polit. Sci.	2	(2,0)	History 14, Am. Ec. Hist.	2	(2,0)
Library 11*, How to Use	R		Math. 12, Analytics	5	(5,0)
Math. 11, Trigonometry	5	(5,0)	M. E. 11, Forge	$\frac{2}{3}$	(0,2)
M. E. 17, Woodwork	$\frac{2}{3}$	(0,2)	Military Science 12	1	(0,3)
Military Science 11	1	(0,3)	Phys. Ed. 12	$\frac{2}{3}$	(0,2)
Phys. Ed. 11,	$\frac{2}{3}$	(0,2)	Physics 12, General	4	(3,2)
Physics 11, General	4	(3,2)	T. F. 12, Textiles	$1\frac{2}{3}$	(1,2)
Yarn Mfg. 11, Textiles	$1\frac{2}{3}$	(1,2)			
18 $\frac{2}{3}$			18 $\frac{1}{3}$		
Summer Work			4 weeks		

*Instruction in "How to Use the Library" given 1 hour per week every other week first semester. Required of all freshmen.

**A two hour per week non credit course will be required of all students who do not show a proficiency in English Composition.

†This curriculum is subject to change.

SOPHOMORE YEAR

Chemistry 11, General	3 $\frac{2}{3}$ (3,2)	Chem. 12, General	3 $\frac{2}{3}$ (3,2)
Drawing 25, Mechanical	$\frac{2}{3}$ (0,2)	Drawing 28, Mechanical	$\frac{2}{3}$ (0,2)
English 21, Lit. & Adv. Comp.	2 (2,0)	English 22, Lit. & Adv. Comp. 2	(2,0)
Math. 21, D. Calculus	5 (5,0)	Math. 22, I. Calculus	5 (5,0)
M. E. 33.5, Machine Shop	1 $\frac{1}{3}$ (0,4)	M. E. 34.5, Machine Shop	1 $\frac{1}{3}$ (0,4)
Military Science 21.	1 (0,3)	Military Science 22	1 (0,3)
T. F. 21, Fabric Const.	2 (2,0)	T. F. 22, El. Design	2 (2,0)
T. F. 23, Weaving	$\frac{2}{3}$ (0,2)	T. F. 24, Weaving	$\frac{2}{3}$ (0,2)
Yarn Mfg. 21, Pickers	2 $\frac{2}{3}$ (2,2)	Yarn Mfg. 22, Cards and Drawing Frames	2 $\frac{2}{3}$ (2,2)

19

19

Summer Work4 weeks

JUNIOR YEAR

Chem. 31, Textile	2 $\frac{2}{3}$ (2,2)	Chem. 32, Textile	2 $\frac{2}{3}$ (2,2)
M. E. 31, Mechanics	3 (3,0)	E. E. 30, Elec. Eng.	2 $\frac{2}{3}$ (2,2)
M. E. 37, Mech. Eng.	3 (3,0)	M. E. 28, Mech. Eng.	3 (3,0)
M. E. 37.5, Mech. Eng. Lab.....	$\frac{2}{3}$ (0,2)	M. E. 32, Mechanics	3 (3,0)
Military Science 33	1 (0,3)	M. E. 38.5, Mech. Eng. Lab.	$\frac{2}{3}$ (0,2)
T. F. 31, Designing	2 (2,0)	Military Science 34	1 (0,3)
T. F. 33, Fabric Analysis	$\frac{2}{3}$ (0,2)	T. F. 34, Fabric Analysis	$\frac{2}{3}$ (0,2)
T. F. 35, Weaving,	1 $\frac{2}{3}$ (1,2)	T. F. 36, Weaving	$\frac{2}{3}$ (0,2)
Yarn Mfg. 31, Roving Frames	2 $\frac{2}{3}$ (2,2)	Yarn Mfg. 32, Cotton Grading	2 $\frac{2}{3}$ (2,2)
Electives	3	Electives	3

20 $\frac{1}{3}$

19

SENIOR YEAR

Chem. 41, Textile	2 $\frac{2}{3}$ (2,2)	Chem. 42, Dyeing	1 $\frac{1}{3}$ (2,0)
E. & S. 41, Econ.	2 (2,0)	E. & S. 42, Sociology	2 (2,0)
Eng. 31, Public Speaking	2 (2,0)	English 32, Business Law	2 (2,0)
Military Science 43	1 (0,3)	Mill Economics 44	2 (2,0)
T. F. 41, Designing	2 (2,0)	Military Science 44	1 (0,3)
T. F. 43, Weave Methods	3 (3,0)	T. F. 42, Jacquard Des.	3 $\frac{1}{3}$ (2,4)
T. F. 45, Weaving	$\frac{2}{3}$ (0,2)	T. F. 46, Weaving	$\frac{2}{3}$ (0,2)
Yarn Mfg. 41, Spinning	3 $\frac{2}{3}$ (3,2)	T. F. 48, Knitting	$\frac{2}{3}$ (0,2)
Electives	3	Yarn Mfg. 42, Combers	1 $\frac{2}{3}$ (1,2)
		Electives	5

20

19 $\frac{2}{3}$ **JUNIOR AND SENIOR ELECTIVES**

Designing	2	Education	2
(New course for second Sem.)		Foreign Language	3
English	3	Mill Project	2 (0,5)
Foreign Language	3	R. O. T. C.	3
Physics (Soph.)	3	Spinning Project	2 (0,5)
R. O. T. C.	3	Weaving	2 (0,5)
Spinning Project	2 (0,5)		
(With approval of director and instructor concerned)			
Surveying	1 $\frac{1}{3}$		

AGRONOMY*

MR. BUIE

MESSRS. McALISTER AND COLLINGS

Agr. 11.—Field Crops—Semester 1 (3 and 0) 3 cr. Fr. I.
(Collings)

A course dealing with the history, origin, botanical characteristics, physiology, ecology, varieties, breeding, soil adaptation, fertilizer requirements, and the cultural methods of the most important crops of the United States.

Text-book: "Production of Field Crops",—Hutchinson and Wolfe.

Agr. 20.—Soils—Semester 2 (2 and 2) 2 2/3 cr. So. I.
(Collings)

A fundamental course in soils. It is intended to cover the basic principles of soil physics, soil fertility, soil biology, and soil management. It deals with the soil as a reservoir for water, as a medium for root development, as a source of nutrients, and as a home of organisms.

A laboratory course is given which deals almost exclusively with the physical properties of the soil.

Text-book: "The Nature and Properties of Soils"—Lyon and Buckman.

Agr. 21.—Farm Machinery—Semester 1 (2 and 2) 2 2/3 cr.
So. I. (McAlister.)

This course deals with the use of machinery in the production of farm crops. Studies are made of the design, construction adjustment and operation of the latest improved field and belt machinery. Laboratory work consists of a detail study and testing of the more common farm machines. Field studies are made when conditions permit.

Text-book: "Equipment for the Farm and Farmation"—Ram-sower.

Agr. 30.—Forage Crops—Semester 2 (3 and 0) 3 cr.
(Buie)

A course dealing with the characteristics of the various forage crops, with emphasis being laid on those grown in this state. These crops are studied with special reference to their adaptations, growing, harvesting, composition, value and uses, and also with reference to their place in our cropping system.

Text-book: "Forage Crops and Their Culture."—Piper.

*Courses are given by divisions. The head of the division follows the title, then the other members. In the description of courses are given, respectively: the official title and number, the descriptive title, the semester offered, class and laboratory hours, in parenthesis, credits, the courses in which they are required, and the instructor.

Agr. 31.—Fertilizers and Manures—Semester 1 (2 and 0) 2 cr.
(Collings).

A study is made of the sources, composition, physical characteristics and uses of fertilizers and manures.

Text-book: "Manures and Fertilizers"—Wheeler.

Agr. 32.—Genetics—Semester 2 (2 and 2) 2 2/3 cr.
(Buie).

A course dealing with the laws of heredity and equally applicable to plants or animals.

Text-book: "Principles of Genetics" Sinnott and Dunn.

Agr. 41.—Advanced Cotton—Semester 1 (2 and 0) 2 cr.
(Collings).

Prerequisite—Agronomy 11.

An advanced course in cotton dealing with all phases of cotton production.

Text-book: "The Production of Cotton"—Collings.

Agr. 42.—Soil Fertility and Management—Semester 2 (2 and 0) 2 cr. (Collings).

A course dealing with the composition of the soil and the influence of crop rotations and fertilizers on the productivity of the soil as shown by field experiments. This course also includes a study of home mixing of fertilizers and the application of commercial plant foods and of lime in agricultural practice. Special attention is directed toward those factors essential for the practical utilization of South Carolina soils.

Text-book—"Soil Management"—Bear.

Agr. 43.—Crop Problems—Semester 1 (1 and 0) 1 cr.
(Buie).

This course deals with a review and discussion of the latest published information concerning the production of field crops.

Text-book: Bulletins, reports and professional magazines will be assigned as references.

Agr. 44.—Advanced Soils—Semester 2 (0 and 2) 2/3 cr.
(Collings)

This laboratory course deals with the chemical and physical determinations of the properties of South Carolina soils.

Text-book: "Soil Characteristics"—Emerson.

Agr. 45.—The Cereals—Semester 1 (2 and 0) 2 cr.
(Buie).

Prerequisite: Agronomy 11, 30, 32 and 41.

A general course dealing with the cereals. Particular emphasis

is laid upon the production of these crops in the south-eastern part of the United States.

Text-book: "The Small Grains"—Charleton; "The Corn Crops" Montgomery.

Agr. 46.—Farm Buildings—Semester 2 (2 and 2) 2 2/3 cr. (McAlister)

A course designed to assist students in the planning and arrangement of farm buildings, including the farm home. Lectures and laboratory are devoted to the arrangement of the farm building lay-out, the design, plan and cost estimation of the major farm buildings.

Text-book: "Farm Buildings"—Foster and Carter.

Agr. 47.—Advanced Crop Laboratory—Semester 1 (0 and 2) 2/3 cr. (Buie.)

This course is intended primarily for students specializing in Agronomy. It includes a morphological study of cotton, corn, small grains and forage crops. Special attention is also given to the identification and germination of seeds.

Text-book: "First Book of Grasses"—Chase.

Agr. 49.—Plant Breeding—Semester 1 (2 and 2) 2 2/3 cr. (Buie).

Prerequisite: Agronomy 32.

A study of methods of improving field crops by breeding. All of the common field crops are included and especial emphasis is placed on the cotton, corn, tobacco, small grains and forage plants.

Text-book: "Breeding Crop Plants"—Hays and Garber.

Agr. 50.—Soil Problems—Semester 2 (1 and 0) 1 cr. (Collings.)

This course deals with a review and discussion of the latest published information concerning recent developments in the field of soil science.

Text-book: Bulletins, reports and professional magazines will be assigned as references.

Agr. 53.—Agricultural Surveying and Drainage—Semester 1 (2 and 2) 2 2/3 cr. (McAlister)

Surveying small areas with tape, level and rod, computing areas, topographic mapping, design and study of drainage system; prevention of soil erosion with special emphasis on terracing.

Agr. 55.—Farm Shop—Semester 1 (1 and 2) 1 1/3 cr. (McAlister.)

This course is designed especially for Agricultural Educational seniors. This is a course in Farm Shop to meet local needs, how to plan and equip the farm shop building; constructing small items of farm equipment from wood, metal and concrete and how to make simple repairs.

Agr. 57.—Farm Motors—Semester 1 (2 and 2) 2 2/3 cr.
McAlister.)

Prerequisite: Agronomy 21.

This is a study of power as applied to agricultural operations through the various forms of farm motors, such as gas engines, tractors, water wheels and electric motors.

AGRICULTURAL ECONOMICS

MR. JENSEN

MESSRS. MILLS AND ROBINSON

Ag. Ec. 12.—Beginning Agricultural Economics—Semester 2
(3 and 0) 3 cr Fr. I. (Jensen and Mills.)

This course gives an introductory and elementary survey of the entire field of agricultural economics. It deals with the economic side of farming, marketing and spending from theoretical and practical viewpoints. Some of the topics stressed are—systems of farming, size of farms, the farm considered as a business enterprise, financial analysis of the farm business, cost of production, farm power, land, credit, labor, marketing cotton and other farm products, prices, economic cooperation by farmers, and the place of agriculture in national production.

Text-book: "Introduction to Agricultural Economics"—Gray.

Ag. Ec. 31.—Farm Management—Semester 1 (2 and 2)
2 2/3 cr. (Robinson).

A course dealing chiefly with farm organization or management; types of farming and the economic, physical and biological factors determining them; selection of farm enterprises for highest profits; physical and financial organization of farms and their operation in areas representative of the important types.

Text-book: "The Management of the Farm"—Moorehouse.

Ag. Ec. 32.—Price Economics—Semester 2 (2 and 2) 2 2/3 cr.
(Jensen)

A study of prices as related to successful farming; price levels, cycles and trends as they influence or determine farm programs and individual farm operations; treatment of prices of farm pro-

ducts, production goods and commodities purchased for the farm family, fundamental relations of prices to booms, depressions and normal times.

Text-book: "The Agricultural Situation"—Warren and Pearson.

Ag. Ec. 34.—**Farm Accounting**—Semester 2 (1 and 4) 2 2/3 cr.
(Jensen and Mills).

This course applies cost accounting and bookkeeping principles and methods to farms and farm enterprises. There is a study of special records and special accounts peculiar to farm costs, such as man labor and mule labor records; field, crop and livestock accounts; the preparation of detailed cost statements; use of cost schedules for determining the profit or loss from individual farm operations; workable cost systems and their analysis in relation to farm management. Farm surveys and farm cost accounts are analyzed and compared.

Text-book: "Farm Accounting—Principles and Problems"—McMurry and McNall.

Ag. Ec. 40.—**Rural Sociology**—Semester 2 (2 and 2) 2 2/3 cr.
(Mills.)

The social problems of rural living.

Text-book: "Rural Sociology"—Taylor, C. C.

Ag. Ec. 41.—**Advanced Agricultural Economics**—Semester 1
(3 and 0) 3 cr. (Jensen.)

An advanced course on the broader problems of agricultural economics with special application to South Carolina. Some of the important topics are—selecting and combining factors of production, diminishing returns on farms; theories of rent, interest, wages and profits; taxation; tariffs; credit; and critical estimates of policies proposed for agriculture.

Text-book: "Outlines of Agricultural Economics"—Taylor, H. C.

Ag. Ec. 42.—**Rural Cooperation**—Semester 2 (3 and 0) 3 cr.
(Mills)

Principles and practices of cooperative marketing.

Text-book: "Principles and Practices of Cooperative Marketing.—Meares and Tabriner.

Ag. Ec. 43.—**Marketing**—Semester 1 (2 and 2) 2 2/3 cr.
(Robinson)

A course dealing with the principles of marketing, commodity marketing and marketing programs; marketing services; market mechanism, market grades and standardization; storage and warehousing; transportation; future trading; inspection and grading of perishable and staple products, films on marketing and field studies will be given in laboratory.

Text-book—"Marketing of Agricultural Products"—Boyle.

Ag. Ec. 45.—**Statistical Methods**—Semester 1 (1 and 2)
1 2/3 cr. (Jensen).

A course on the meaning and application of statistical method which will train students how to make correct economic and statistical studies. Some of the important topics are laws of sampling, laws of averages, dispersion, variation, table construction, graphic presentation and correlation.

Text-book: "Statistical Method"—Jerome.

Ag. Ec. 50.—**Special Problems**—Semester 2 (1 and 0) 1 cr.
(Jensen)

Discussion groups of special problems in the field of agricultural economics, or thesis or report prepared from local economic data under supervision.

Ag. Ec.—**Bible**.—Semester 2. (1 and 0) Elective
(Mills)

The Bible is studied (a) as history, showing the development of the Jewish people and their relations with other nations, (b) as the rule of faith and practice, discussing its peculiar claims for itself, its ethical content, and its influence upon the world.

AGRICULTURAL ECONOMICS DIVISION

SPECIAL TEACHING EQUIPMENT

For several years the division has been carrying on economic research on a considerable scale under local South Carolina conditions. The principal groups of studies are Farm Management, Marketing and Consumption, with several projects in each group. Approximately one thousand complete farm business and cost records, in addition to a large number of special types of records and city market tabulations, are now on file in the division. This feature is a distinct teaching advantage because it gives students a great deal of first-hand and interesting material with which to work, and text-books do not have to be relied on entirely.

ANIMAL HUSBANDRY

MR. STARKEY

MR. RITCHIE

A. H. 12.—Types, Breeds, Market Classes and Grades of Farm Animals—Semester 2 (2 and 2) 2 2/3 cr. Fr. I. (Ritchie).

This course is designed to give the student a knowledge of the characteristics and use of the various types of farm animals, the history, methods of improvement, and characteristics of the leading breeds; market demands and market classification of live stock.

Text-book: "Types and Market Classes of Live Stock"—Vaughan
"Types and Breeds of Farm Animals"—Plumb.

A. H. 31.—Principles of Feeding—Semester 1 (2 and 2)
2 2/3 cr. (Morgan).

A study of the composition of feeds, use of feeds, feed requirements and calculation of balanced rations for farm animals; classification and value of feedstuffs.

Text-book: "Feeds and Feeding"—Henry and Morrison.

A. H. 32.—Live Stock Judging—Semester 2 (0 and 2) 2/3 cr.
(Ritchie)

In this course the fundamentals in livestock judging and in giving reasons are taken up in detail.

A. H. 40.—Breeding—Semester 2 (2 and 2) 2 2/3 cr.
(Starkey and Ritchie).

Prerequisite: Animal Husbandry 12 and Genetics.

This course is an advanced study in breeding which includes the practical application of the principles of genetics to the breeding of farm animals. The course includes a discussion of the subjects of reproduction, variation, heredity, selections, line breeding, inbreeding, cross breeding, grading and other subjects correlated with the breeding and improvement of farm animals.

Text-book: "Animal Breeding"—Winters.

A. H. 41.—Feeds and Feeding—Semester 1 (2 and 2) 2 2/3 cr.
(Starkey)

Prerequisite: Animal Husbandry 31.

A detailed study of the composition, digestibility, use and value of different feedstuffs; an advanced study of digestion, absorption, metabolism, and functions of food nutrients; feed requirements and feeding standards.

Text-book: "Feed and Feeding"—Henry and Morrison.

A. H. 42.—Pork Production and Sheep Production—Semester 2
(2 and 2) 2 2/3 cr. (Starkey and Ritchie).

Prerequisite: Animal Husbandry 12 and 31.

The feeding, breeding and management of sheep and swine.

Text-book: "Pork Production"—Smith; "Productive Sheep Husbandry"—Coffey.

A. H. 43.—Animal Production—Horses and Mules and Beef Production—Semester 1 (2 and 2) 2 2/3 cr. (Starkey Ritchie).

Prerequisite: Animal Husbandry 12 and 31.

In this course the work is divided into two distinct units. For the first half of the semester a study of the breeding, feeding, care and management of horses and mules is taken up, and the second a study of the breeding, care and management of beef cattle, including a careful study of feeding and marketing methods. Textbooks supplemented by station bulletins.

Text-books: "Productive Horse Husbandry"—Gay; "Beef Cattle"—Snapp.

A. H. 45.—Advanced Stock Judging and Meats—Semester 1
(2 and 2) 2 2/3 cr. (Ritchie)

This is a course in the judging of breeding animals and fat stock, and in the slaughtering, cutting, and curing of meats, and the preparation of by-products.

Text-books: "Judging Farm Animals"—Plumb; "Meat and Meat Products"—Tomhave.

ARCHITECTURE

MR. LEE

MESSRS: CROWGEY AND FREER

Arch. 11.—Elements of Architecture—Semester 1 (0 and 4)
1 1/3 cr. Fr. II. (Freer).

Exercises in brush work and studies of architectural elements, walls, openings, the Orders, vaults, etc., treated with reference to their employment in design. Lettering.

Arch. 12.—Architectural Design—Semester 2 (0 and 4)
1 1/3 cr. Fr. II. (Freer).

Continuation of 11. Problems in elementary design involving the case of the elements.

Arch. 13-14.—Freehand Drawing—Semester 1 and 2 (0 and 4)
1 1/3 cr. Fr. II. (Freer).

This course covers angular and parallel perspective, the perspective of circles and shading.

The study of pencil technique is stressed for sketching purposes and charcoal work from the cast is given in order to develop a correct sense of values, form and proportion.

Arch. 15.—**Descriptive Geometry**—Semester 1 (0 and 2)
2/3 cr. Fr. II. (Klugh.)

The fundamental problems in descriptive geometry are studied and applied to the solution of problems in architecture, leading particularly to the casting of shadows.

Arch. 16.—**Shades and Shadows and Perspective**—Semester 2
(0 and 2) 2/3 cr. Fr. II. (Klugh.)

Problems in the casting of conventional shadows of architectural forms and the theory and practice of architectural perspective are solved.

Arch. 25, 26.—**History of Architecture**—Semester 1 and 2
(3 and 0) 3 cr. So. II (Crowgey).

Study of historic styles and monuments of architecture, classic, mediaeval and Renaissance. This subject is given by illustrated lectures and text-book. The student is required to do research work in the library and to make sketches.

Arch. 28, 30.—**Summer Work** 4 weeks. So. II and Jr. II.

Each student in Architecture is required to spend four weeks of the summer between the sophomore and junior years and also between the junior and senior years, employed in an architect's office, or on a large building construction project, or he may be required to make a measured drawing of some designated building of good architectural character. If he has had sufficient experience along these lines he may be excused from summer work. Before engaging in this work the student must secure the written approval of a member of the faculty of Architecture.

Arch. 21-22.—**Architectural Design** —Semester 1 and 2
(0 and 14) 4 2/3 cr. So. II. (Crowgey).

Prerequisites: Arch. 12, 14, 15, 16.

A series of simple problems in design, applying classic proportions to modern buildings; criticism, sketch problems, Beaux-Arts problems. Rendering in water color and other mediums.

Architectural library reference books and plates.

Arch. 23-24.—**Cast Drawing**—Semester 1 and 2 (0 and 3) 1 cr.
So. II. (Freer.)

Prerequisite: Arch. 14.

Thorough drill in drawing groups of simple casts of architectural fragments and parts of the figure, in pencil, pen and ink, and charcoal rendering. Study of color in theory and practice. Water color sketching and out-of-door sketching.

Arch. 31-32.—**Architectural Design**—Semester 1 and 2
(0 and 14) 4 2/3 cr. Jr. II (Crowgey).

Prerequisites: Architecture 22.

A series of problems in design, composition and planning, sketch problems, Beaux-Arts problems.

Architectural library reference books and plates.

Arch. 33-34.—**Cast Drawing**—Semester 1 and 2 (0 and 2)
2/3 cr. Jr. II. (Freer).

Prerequisite: Architecture 24.

Advanced work in the drawing of antique sculpture, study of anatomy. All work is in color. The student may choose his medium such as charcoal, conte, pastel, etc. Modeling.

Arch. 35.—**History of Art**—Semester 1 (2 and 0) 2 cr. Jr. II.
(Freer.)

Lectures on periods and styles of painting and sculpture. Stereoptician and photographs.

Arch. 37-38.—**Building Construction**—Semester 1 and 2
(2 and 2) 2 2/3 cr. Jr. II (Lee).

Carpentry: study of building materials, their uses and forms; details of frame construction, hardware, estimates and specifications; problems in calculation, working drawings. Blue printing.

Arch. 39.—**Historic Ornament**—Semester 1 (0 and 2) 2/3 cr.
Jr. II. (Freer).

Prerequisite: Architecture 22, 24, 26.

Motifs in historic ornament. Lectures and large drawings in water color.

Arch. 40.—**Life Drawing**—Semester 2 (0 and 2) 2/3 cr.
Sr. II. (Freer).

Studies of the nude and draped figure in charcoal, pencil, and pen and ink. Quick sketches for action and movement. A course designed to meet the needs of the architect.

Arch. 41-42.—**Architectural Design**—Semester 1 and 2
(0 and 16) and (0 and 13) 5 1/3 and 4 1/3 cr. Sr. II
(Crowgey).

Prerequisite: Arch. 32.

Advanced problems in architectural design. Composition, planning, etc., worked up in detail. Eight and ten hour sketch problems. Archaeology. Beaux-Arts problems, Southern Inter-collegiate Architectural Competition.

Architectural library books and plates as reference.

Arch. 45-46.—**Structural Design**—Semester 1 and 2 (0 and 6) and (0 and 10) 2 and 3 $1\frac{1}{3}$ cr. Sr. II. (Lee).

Prerequisite: Architecture 38.

Preparation of complete working drawings and specifications for frame and masonry buildings, detail drawings of the construction with necessary calculations. Steel and reinforced concrete design. Blue printing.

Arch. 43-44.—**Building Construction**—Semester 1 and 2 (2 and 0) 3 cr. Sr. II. (Lee).

Prerequisite: Architecture 38.

Masonry; study of foundations, mortars, details of masonry construction, estimates, specifications, superintendence, problems in calculation.

Arch. 47.—**Mechanical Plant**—Semesters 1 and 2 (2 and 0) 2 cr. Sr. II. (Lee).

Study of various systems of heating and ventilating of buildings, electrical installations, plumbing, etc. with applications to practical problems.

Arch. 48.—**Professional Practice**—Semester 2 (1 and 0) 1 cr. Sr. II. (Lee).

Office management and organization, competitions, laws, contracts, ethics. American Institute of Architects documents.

BOTANY AND BACTERIOLOGY

MR. BARRE

MESSRS: AULL, ROSENKRANS and RICE

Bot. 10.—**General Botany**—Semester 2 (3 and 2) 3 $2\frac{2}{3}$ cr. Fr. III. X.

A course aiming to give a general survey of the principles manifest in the life of plants. The first part of the semester a study is made of the form, structure and physiology of the higher plants, followed by a study of algae, bacteria, fungi, liverworts, mosses, with the application of biological laws; and descriptions, life histories and the adaptation of the representative organisms are considered.

Text-book: "A Textbook of General Botany"—Smith, Overton, etc.

Bot. 21.—**Agricultural Botany**—Semester 1 (2 and 2) 2 $2\frac{2}{3}$ cr. So. I. (Rosenkrans and Rice).

The structure and functions of the various parts of the higher seed plants and the broad principles of metabolism, growth, and reproduction are first taken up, followed by a study of the lower organisms.

Text-book: "Botany with Agricultural Applications"—Martin.

Bot. 22.—**General Botany**—Semester 2 (2 and 2) 2 2/3 cr.
So. I. (Rosenkrans and Rice.)

A continuation of course 21. It deals with the changes in form, structure, and methods of reproduction from the lower to the higher forms of plants. The latter part of the semester is devoted to systematic botany.

Text-book: "Field, Forest, and Garden Botany"—Gray.

Bot. 30.—**Plant Physiology**—Semester 2 (2 and 4) 3 1/3 cr.
(Rosenkrans and Rice).

Prerequisite: Botany 10 or 21; one year of Chemistry, and one semester of Physics.

A study is made of the use of the different kinds of cells, tissues, and organs of plants, the object being to teach the students how plants live and grow and why they are dependent on certain physical factors, as light, water, air, etc.

Text-book: "Text-book of Botany" Vol. I, Part II Coulter, Barnes and Cowles, supplemented by lectures and reports of technical papers.

Bot. 32.—**Forestry**—Semester 2 (2 and 2) 2 2/3 cr.
(Rosenkrans and Rice.)

Prerequisite: Botany 10 or 21.

A course dealing with the general principles of forestry, and the practical methods applied in lumbering, forest propagation, and conservation.

Text-book: "Elements of Forestry."—Moon and Brown.

Bot. 41.—**Field Crop Diseases**—Semester 1 (2 and 2)
2 2/3 cr. (Rosenkrans).

A systematic study of fungi with special reference to species causing diseases of field crops. The students are taught to recognize the more common diseases and the question of prevention and practicable remedies is fully discussed.

Text-book: To be selected.

Bot. 43.—**Orchard and Truck Crop Diseases**—Semester 1
(2 and 2) 2 2/3 cr. (Rosenkrans.)

The fungi causing diseases of all fruits and vegetables are studied, special stress being placed upon the symptoms, effect upon the host plants, and control measures.

Text-book: To be selected.

Bact. 31.—**General Bacteriology**—Semester 1 (2 and 4)
3 1/3 cr. (Aull).

This course is designed to give the student a clear working knowledge of the fundamentals of Bacteriology. The relation and importance of bacteria to agriculture are stressed. Particular attention is paid to types found in milk, soil and water.

Text-books: "Bacteriology"—Buchanan; Laboratory Manual; "Laboratory Technique in Bacteriology"—Levine.

Bact. 40.—**Dairy Bacteriology**—Semester 2 (2 and 4) 3 1/3 cr. (Aull).

Prerequisite: Bacteriology 31.

A course for Seniors who major in Dairying. A detailed study is made of the relation of bacteria to milk and milk products.

Text-book: "Milk"—Heineman.

Laboratory Manual: Standard Methods of Milk Analysis and Mimeographed Notes.

Bact. 42.—**Sanitary Bacteriology**—Semester 2 (2 and 4) 3 1/3 cr. (Aull).

Prerequisite: Bacteriology 31.

A course designed to meet the needs of students who major in Chemistry. A study is made of the location and protection of water supplies, the purification of water, and the proper disposal of sewage.

Text-book: "Elements of Water Bacteriology"—Prescott and Winslow; "Clean Water and How to Get It"—Hazen.

Laboratory Manual: Standard Methods for the Examination of Water and Sewage of the A. P. H. A. & Mimeographed Notes.

Bact. 44.—**Soil Bacteriology**—Semester 2 (2 and 4) 3 1/3 cr. (Aull).

Prerequisite: Bacteriology 31.

This course is primarily for students majoring in Agronomy. A study is made of the relation of Microorganisms to the Nitrogen, Carbon, Sulphur and Iron Cycles and to the Physical Properties of Soil.

Text-book: To be selected.

Laboratory Manual: To be selected.

CHEMISTRY

MR. BRACKETT

MESSRS: LIPPINCOTT, MITCHELL, POLLARD, MURPHY.
AND MYERS

Chem. 11-12.—**General Chemistry**—Semesters 1 and 2

(3 and 2) 3 2/3 cr. Fr. I, IV, X. So. III, V, VI, VII, IX. XI. (Pollard, Murphy, and Myers).

An introduction to chemistry, including the preparation and properties of the common substances, together with the consideration of the fundamental principles of chemical theory. Lecture experiments and laboratory exercises supplement the class work.

Text-book: "Elementary Study of Chemistry—McPherson and Henderson Laboratory Manual.

Chem. 21.—**Elementary Analytical Chemistry**—Semester 1
(1 and 3) 2 cr. So. I. (——).

Prerequisites: Chemistry 11, 12.

A brief study of the qualitative detection of the common elements, followed by class and laboratory instruction of the principles of gravimetric and volumetric methods used in elementary analysis.

Chem. 22.—**Agricultural Organic Chemistry**—Semester 2
(2 and 2) 2 2/3 cr. So. I. (Brackett, ——).

Prerequisites: Chemistry 11, 12.

The study of those facts and principles of organic and biological chemistry which are fundamental to the sciences dealing with plant and animal life.

Text-book: Phillips' "Fundamentals of Organic and Biological Chemistry."

Chem. 23.—**Qualitative Analysis**—Semester 1 (2 and 8)
4 2/3 cr. So. IV. (Lippincott).

Prerequisites: Chemistry 11-12.

The properties and reactions of metallic elements and of the common inorganic and organic acids, also the qualitative analysis of a number of solutions and solid mixtures. Part of the time is set aside for theoretical work, during which time special attention is paid to the theory of electrolytic dissociation and the law of mass action.

Text-book: "Qualitative Chemical Analysis"—A. A. Noyes.

Chem. 24.—**Quantitative Chemistry**—Semester 2 (2 and 8)
4 2/3 cr. So. IV. (Lippincott).

Prerequisites: Chemistry 11, 12.

The lectures and laboratory instruction are designed to prepare students to understand the mathematical relations, and the fundamental laws of chemistry, and to illustrate the principles involved in both gravimetric and volumetric methods used in elementary analysis.

Text-books: "Quantitative Analysis"—Mahin; "Laboratory Manual of Introductory Quantitative Analysis"—Nichols.

Chem. 25-26.—Organic Chemistry—Semesters 1 and 2

(3 and 2) 3 2/3 cr. So. IV, X. (Lippincott).

Prerequisites: Chemistry 11, 12.

A study during the first semester of the underlying principles of organic chemistry; the more common saturated and unsaturated aliphatic hydrocarbons; alcohols and their derivatives and aldehydes and ketones.

The second semester is devoted to the study of amines, polyatomic alcohols; hydroxyacids; carbohydrates; proteins; benzene and some of its homologues and a few of the more important dyes.

The laboratory course involves the preparation and purification of compounds selected from the fatty and aromatic series for the illustration of important synthetic reactions.

Text-books: "Organic Chemistry"—Remsen and Orndorff; "Laboratory Manual of Organic Chemistry"—W. R. Orndorff.

Chem. 31-32.—Physical Chemistry—Semesters 1 and 2

(3 and 4) 4 1/3 cr. Jr. IV. (Lippincott).

Prerequisites: Chemistry 11, 12.

A systematic presentation of modern chemical theory in which special attention is paid to the following topics:—gases, liquids, and solids; the theory of solutions; reaction velocity, catalysis and chemical equilibrium; the Phase Rule; colloid chemistry; thermo-chemistry and elementary electro-chemistry.

The laboratory work involves qualitative and quantitative experiments illustrating the principles of physical chemistry and including practice in performing physico-chemical measurements. An important feature of this course is the presentation of detailed reports based upon data obtained in the laboratory.

Text-books: "Physical Chemistry"—Bigelow; "Laboratory Outlines in "Physical Chemistry."—Briggs.

Chem. 33.—Quantitative Chemistry—Semester 1 (0 and 4)

1 1/3 cr. (Mitchell).

Prerequisite: Chemistry 24.

A continuation of Chemistry involving the analysis of limestone, clay, silicates and the products of some important industrial and metallurgical operations as coal, pig iron, steel, etc. Electrolytic methods and separations.

Text-books: "Quantitative Analysis"—Mahin and other standard reference books.

Chem. 34.—Gas and Fuel Analysis—Semester 2 (0 and 2)

2/3 cr. (Lippincott.)

Prerequisite: Chemistry 24.

This course consists in the analysis of various gases and mixtures of gases, such as coal gas, flue gas, natural gas, air and others. Also the analysis of various fuels.

Text-book: "Gas Analysis"—Dennis.

Chem. 35.—**Organic Chemistry**—Semester 1 (2 and 2) 2 2/3 cr.
(Lippincott.)

Prerequisites: Chemistry 25, 26.

A review and extension of chemistry 25, 26, the greater portion of time being given to the study of aromatic compounds.

The laboratory work is more advanced and the greater portion of the time will be devoted to quantitative organic analysis.

Text-book: "Organic Chemistry"—Perkin and Kipping.

Chem. 13, 14.—**Agricultural Chemistry**—Semesters 1 and 2
Jr. I. (2 and 0, except Group C for semester 1). 2 cr.
(Brackett).

Prerequisites: Chemistry 11, 12.

This course is devoted to a study of the composition of plants and a discussion of the sources from which the plant derives its constituent elements..

Text-books: "Fundamentals of Organic and Biological Chemistry" Phillips; "General Agricultural Chemistry"—Hart and Tottingham.

Note: Given in 1927-28 to Junior I. Not to be given after 1927-28.

Chem. 41, 42.—**Inorganic Chemistry**—Semesters 1 and 2
(2 and 0) 2 cr. (Brackett).

Prerequisite: Chemistry 11, 12.

A review, extension and continuation of Chemistry 1, with special reference to the laws and theories of chemistry, and a study of some of the rarer substances.

Text-book:

Chem. 43, 44.—**Colloid Chemistry**—Semesters 1 and 2 (2 and 0)
2 cr. (Pollard).

Prerequisite: Chemistry 31, 32.

The general theory of colloid chemistry, with some of its applications in industrial chemistry, dyeing, photography, ceramics, soils, biology, food, etc.

Text-book: "Applied Colloid Chemistry."—Bancroft.

Chem. 45.—**History of Chemistry**—Semester 1 (2 and 0) 2 cr.
(Brackett.)

Prerequisites: Chemistry 25, 26.

The study of the development of the science of chemistry from the earliest times to the present day.

Text-book: "History of Chemistry."—Moore.

Chem. 46.—**Stoichiometry**— Semester 2 (2 and 0) 2 cr.
(Brackett).

Prerequisites: Chemistry 11, 12.

A study of chemical equations, the various kinds in use with their meaning and value; different ways of balancing equations, calculations of various kinds involved in chemistry.

Text-book: "General Calculations."—Ashley.

Chem. 47.—**Technical Analysis-Thesis**—Semesters 1 and 2
(0 and 2) 2/3 cr. (Mitchell).

Prerequisite: Chemistry 24.

The analysis of commercial fertilizers, feeding material, waters, oils, etc. The latter part of the course is devoted to thesis work.

Text-book: Methods of the Association of Official Agricultural Chemists; standard reference books on quantitative analysis.

Chem. 48.—**Selected Topics in Chemistry**—Semester 2
(4 and 0) 4 cr. Brackett.)

Selected topics in inorganic, organic, industrial, agricultural and sanitary chemistry, to suit the needs of the student.

Chem. 52.—**Advanced Laboratory Practice**—Semester 2
(0 and 3) 1 cr. (Mitchell.)

Advanced laboratory practice inorganic, organic, agricultural and sanitary, to suit the needs of the student.

Chem. 53-54.—**Physiological Chemistry**—Semesters 1 and 2
(2 and 2) 2 2/3 cr.

(Not to be offered in 1927-28.)

Prerequisite: Chemistry 25 and 26.

CIVIL ENGINEERING

MR. CLARKE

MESSRS: GLENN AND BLANDFORD

C. E. 21, 22.—**Surveying**—Semester 1 and 2 (2 and 4)
3 1/3 cr. So. V. (Clarke.)

Prerequisites: Math. 11, 12.

This course is designed to give the student a considerable facility in the theory and use of modern surveying instruments and methods, including the plotting of notes for maps and profiles.

Text-book: "Principles and Practice of Surveying."—Breed and Hosmer.

C. E. 23.—**Surveying**—Semester 1 (1 and 2) 1 2/3 cr. So. VI,
IX. (Blandford).

Prerequisites: Math. 11, 12.

This course covers only the more simple and fundamental theory and use of the tape, transit, and level.

Text-book: "Principles and Practice of Surveying."—Breed and Hosmer.

C. E. 28.—**Summer Camp.** (Two weeks at end of Soph. V. year).
(Jr. V, two weeks). (Clarke).

Prerequisites: C. E. 21, 22.

This course will comprise the complete survey for a road between two selected termini.

In lieu of attendance at this camp, credit will be awarded for two consecutive months bona fide employment of a satisfactory engineering nature.

C. E. 31.—**Railroad Curves and Earthwork**—Semesters 1
(3 and 0) 3 cr. Jr. V. (Clarke).

Prerequisites: C. E. 21, 22.

This course covers the theory and solution of problems involving simple, compound and reverse curves. Special attention is given to the spiral transition from tangent to curve. The setting of slopestakes and various problems of computation of earthwork from cross sections and also from contours are thoroughly covered in this course.

Text-book: "Railroad Curves and Earthwork."—Allen.

C. E. 32.—**Mechanics of Materials**—Semester 2 (3 and 0) 3 cr.
Jr. V., Sr. VII. (Tucker).

Prerequisite: M. E. 31, 37.

A study of the various building and structural materials as regards stresses in riveted joints, beams and columns. Particular reference to be given to the analysis of the various stresses in all types of beams.

This course is given as M. E. 51, first semester.

Text-book: "Strength of Materials."—Boyd.

C. E. 33.—**Masonry Construction**—Semester 1 (2 and 0) 2 cr.
Jr. V. (Clarke.)

This course covers the fundamental principles of the design of masonry structures and foundations.

Text-book: "Masonry Construction."—Baker.

C. E. 34.—**Graphic Statics**—Semester 2 (1 and 2) $1\frac{2}{3}$ cr.
Jr. II, V. (Glenn.)

A study of the principles of graphic analysis and the application of these principles. This course is designed to cover all common problems of structural design solved by graphics.

Text-book: "Graphic Statics."—Malcolm.

C. E. 36.—Structural Design—Semester 2 (0 and 4) 1 1/3 cr.
Jr. V. (Glenn.)

Prerequisite: M. E. 31, 37.

This course is devoted for the first half of the semester to a thorough study of built up sections, riveting and the design of details. The second half is devoted to actual design of structures.

Text-book: "Design of Highway Bridges." Ketchum.

C. E. 40.—Bridge Design—Semester 2 (2 and 6) 4 cr. Sr. V.
(Glenn).

Prerequisites: C. E. 32, 34, 36.

A general course in the field of bridge engineering along with the practice of working out actual designs.

Text-book: "Design of Highway Bridges."—Ketchum.

C. E. 41.—Roads and Pavements—Semester 1 (3 and 0) 3 cr.
Sr. V. (Glenn).

Prerequisite: C. E. 24.

A study of the design, location and construction of roads and pavements. Must be taken along with C. E. 31 and 32.

Text-book: "Roads and Pavements"—Agg.

C. E. 42, 43.—Road Materials Testing Laboratory—Semester 1
and 2 (0 and 3) 1 cr. Sr. V. (Glenn).

Prerequisites: C. E. 32 and registration or credit in C. E. 47.

The actual tests and analysis of road and construction materials.

Text-book: "Sampling and Testing of Highway Materials."—Barton and Doane.

C. E. 44.—Water Supply—Semester 2 (2 and 0) 2 cr. Sr. V.
(Clarke.)

Prerequisites: C. E. 47.

A course devoted to the engineering procedure necessary to determine the quantity and quality of various sources of water supply; and the method used to improve the quality of unpotable waters; and the construction of works for the collection of water and works for the distribution of water.

C. E. 45.—Reinforced Concrete Design—Semester 1 (2 and 2)
2 2/3 cr. Sr. V. (Glenn).

Prerequisites: C. E. 32, 41, M. E. 31, 37, 38.

This course is devoted to the theory and practice of reinforced concrete design.

C. E. 46.—Sewerage and Sewage Disposal—Semester 2 (3 and 0)
3 cr. Sr. V. (Clarke.)

Prerequisite: C. E. 47.

A very specific course covering all the points of theory and practice involved in the construction of a modern sewerage system, and the various methods employed to dispose of sewage in accordance with sanitary law.

Text-book: "Sewerage and Sewage Treatment."—Babbitt.

C. E. 47.—Reinforced Concrete Design—Semester 1 (2 and 0)
2 cr. Sr. II. (Clarke).

Prerequisite: C. E. 32.

Similar to course C. E. 45.

C. E. 48.—Engineering Investigation.—Semester 2 (0 and 2)
2/3 cr. Sr. V. (Clarke).

Prerequisites: Registration in C. E. 44 and 46.

This course consists of an actual design of a water works and sewerage system for some near by town.

C. E. 49.—Hydraulics—Semester 1 (3 and 0) 3 cr. Sr. V.
(Clarke).

Prerequisites: Math. 21, 22.

A course covering the principles of the flow of water, with particular reference to the need of knowledge thereof in connection with the study of water supply systems and sewerage.

Text-book: "Hydraulics."—Daugherty.

C. E. 50, 51.—Thesis—Semester 1 and 2 (0 and 2) 2/3 cr.
Sr. V. (Clarke.)

Every senior, prior to graduation, is required to prepare and submit a thesis. This may be either an original theoretical investigation; or an actual design similar to the work done in courses 40, 44, 46, 41 and 42. The time allotted to this subject represents merely the time devoted thereto under the direct supervision of the instructor. The student is expected to put in much additional individual work.

C. E. 52.—Hydraulics—Semester 2 (2 and 0) 2 cr. Sr. VI, IX.
(Tucker).

Prerequisites: Math. 21, 22.

A general course in the fundamental principles governing the flow of water through orifices, wiers, pipes and channels.

Text-book: "Hydraulics". Daugherty.

DAIRY HUSBANDRY

MR. LaMASTER

MR. GOODALE

D. H. 20.—**Milk Products, Production and Manufacture**—Semester 2 (2 and 2) 2 2/3 cr. So. I. (Goodale).

The object of this course is to give the student a knowledge of the production, care and testing of milk and its products; also the management and feeding of dairy cattle.

Text-book: "Productive Dairying"—Washburn.

D. H. 30.—**Judging**—Semester 2 (0 and 2) 2/3 cr.
(LaMaster)

A study of the breeds, type and characteristics of dairy cattle with practice in judging and selection of animals for production and exhibition.

D. H. 47.—**Genetics**—Semester 1 (2 and 2) 2 2/3 cr.
(LaMaster).

A course dealing with the laws of heredity with especial emphasis on their application in the animal kingdom.

Text-book: "Principles of Genetics"—Sinnott and Dunn.

D. H. 41, 42.—**Dairy Manufactures**—Semester 1 (2 and 2) 2 2/3 cr. Semester 2 (2 and 4) 3 1/3 cr. (Goodale).

Prerequisite: Dairy 20.

This course deals with the problems of market milk and the intensive study of the manufacture of butter, cheese, and ice cream.

Text-books: "Principles and Practice of Buttermaking"—McKay and Larsen, "The Book of Cheese"—Thom and Fisk, "The Book of Ice Cream"—Fisk.

D. H. 43.—**Creamery Organization and Management**—Semester 1 (3 and 0) 3 cr. (Goodale.)

Prerequisite: Dairy 20.

A thorough study of the organization and operation of commercial creameries, cream accounting, advertising and marketing of dairy products.

Text-book: "Management of Dairy Plants"—Mortensen.

D. H. 44.—**Breeding**—Semester 2 (1 and 2) 1 2/3 cr.
(LaMaster.)

Prerequisites: Dairy 20 and Dairy 40—Genetics.

A study of the practical application of the principles of genetics in its relation to dairy cattle breeding. This will be followed by an extensive study of the leading families and individuals of the major dairy breeds.

Text-book: To be selected.

D. H. 45.—**Feeding and Management**—Semester 1 (2 and 2) 2 2/3 cr. (LaMaster).

Prerequisite: Dairy 20.

This course is an advanced study of feeds, care, management and development of dairy cattle and methods of milk production.

Text-book: "Dairy Cattle Feeding and Management"—Larson and Putney.

D. H. 48.—**Advanced Dairy Farming**—Semester 2 (2 and 2) 2 2/3 cr. (LaMaster.)

Prerequisite: Dairy 20.

A study of dairy herds based on milk and feeding records, dairy farming and its relation to soil fertility, and dairy farm management.

Text-book: "Dairy Cattle and Milk Production"—Eckles.

D. H. 51, 50.—**Problems**—Semesters 1 and 2 (1 and 0) 1 cr. (LaMaster and Goodale).

A study of special research problems in production and manufactures. The thesis problem required of each senior will be reviewed.

DRAWING

MR. LEE

MESSRS: KLUGH, HARRIS, AND FREER

Drawing 11, 12.—**Freehand Drawing**—Semesters 1 and 2 (0 and 2) 2/3 cr. Fr. IV, V, VI, VII, VIII, IX, XI. (Harris, Freer.)

Drawing is the language of the engineer, and frequently free-hand sketching is the mode of expression.

The student is thoroughly drilled in the fundamental principles of perspective, from which he develops the ability to represent engineering shapes. Every effort is made to develop the student's imagination. Machine parts are used for models.

The first semester is prerequisite to the second.

Drawing 13, 14.—**Mechanical Drawing**—Semesters 1 and 2. (0 and 2) 2/3 cr. Fr. IV, V, VI, VII, VIII, IX, XI. (Klugh, Harris).

The student is thoroughly grounded in the principles of orthographic projection. The course takes up geometrical problems, lettering, working drawings from sketches and machine parts, tracing and printing.

The first semester is prerequisite to the second.

Text-book: "Engineering Drawing."—French.

Drawing 25.—**Mechanical Drawing**—Semester 1 (0 and 2)
2/3 cr. So. V. VI, VII, IX, XI. (Klugh).

Prerequisites: Drawing 12 and 14.

Fundamentals of descriptive geometry demonstrated in actual working drawings. Relationship of projections to each other in the reading of drawings. The usual types of projections required in class exercises, particularly with reference to intersections and developments.

Drawing 26.—**Structural Drawing**—Semester 2 (0 and 2)
2/3 cr. So. V. (Klugh).

Prerequisites: Drawing 12, 14 and 25.

Elementary structural principles, study of symbols, proportions and minor design. Reading of structural drawings, study of methods in drafting, tracing and blue printing.

Drawing 28.—**Mechanical Drawing**—Semester 2 (0 and 2)
2/3 cr. So. VI, VII, IX, XI. (Klugh).

Prerequisite: Drawing 25.

Shop drawings from sketches and machine parts, assemblies and details required. Use of methods in shop practice, drafting, tracing and blue printing. Reading of drawing.

Drawing 31, 32.—**Machine Design**—Semesters 1 and 2
(0 and 3) 1 cr. Jr. VI, IX, (Klugh).

Prerequisite: Drawing 28.

Principles of machine design carefully studied and worked out in class problems. Theory stressed in lectures with problems required in theory and practice. Working drawings required and reading of them practiced. Tracing and blue printing.

ECONOMICS AND SOCIOLOGY

MR. BEARLEY

E. & S. 31, 32.—**Psychology**—Semesters 1 and 2 (2 and 2) 3 cr.
Jr. III.

An introductory course in general psychology emphasizing the study of the nervous system, the psychology of learning, and selected problems in social psychology. This course is especially valuable for students taking advanced work in social science or education.

E. & S. 33.—**Economics for Students of Agriculture**—Semester 1 or 2 (3 and 0) 3 cr.

Prerequisite: History 12 or Agricultural Economics 12.

This is an elementary course in descriptive economics similar to Economics and Sociology 11, except that it is somewhat more extended and is especially adapted to the needs of students in agriculture.

E. & S. 41—Economics Semester 1 (2 and 0) 2 cr.

Prerequisite: History 12 or Agricultural Economics 12.

Required for graduation except in Course I.

This is an elementary course in descriptive economics and is designed to introduce the student to modern business conditions and practices. Among the topics considered are risk-taking, money, banking, business cycles, foreign trade, supply and demand, etc.

E. & S. 42.—Sociology—Semester 2 (2 and 0) 2 cr.

Required for graduation except in Course 1.

This course is a study of the elementary principles of sociology and of some of the special social problems considered in the light of general principles.

E. & S. 44.—Introduction to Psychology—Semester 2 (2 and 0) 2 cr.

This course will endeavor to give a summary of the essentials of elementary psychology. The contributions of psychology to the understanding of "human nature" will be stressed.

EDUCATION

MR. CRANDALL

MESSRS: AYERS, TATE, McLEAN, BOOKER, AND DUGGAN

Courses in Education are offered to aid persons in preparing for the following general types of positions:

- 1.—Teachers of Agriculture.
- 2.—Teachers of Trades and Industries.
- 3.—Teachers of Science, Mathematics, and other high school subjects.
- 4.—Teachers of Shop Work.

The following sequences of courses are planned to train men for these positions:

Teachers of Agriculture—Agricultural Education 31, 32, 40, 41, 42.

Teachers of Trades and Industries—Industrial Education 32, 33, 43, 44, 46.

Teachers of high school subjects—Education 32, 35, 45, 48, 52.

Teachers of Shop Work—Education 32, 33, 43, 44, 46.

Ed. 31.—Introduction to Agricultural Education—Semester 1 (1 and 6) 3 cr. (Crandall, Ayers, McLean, Duggan).

The principal purpose of this course is to familiarize students with the work of teachers of Agriculture in local communities. Students observe and report on the work of all-day, part-time,

evening and day unit classes; community and promotional work; equipment and general organization of a program in Agricultural Education for a local community. Students are expected to spend two afternoons each week in the practice department.

Ed. 32.—Educational Psychology—Semester 2 (2 and 3) 3 cr. (Ayers).

Study of the learning process in terms of situation, bond, response; how to study; effect of attitude, feelings and method on the learning process; how to remember; value of recognition and proper control of instincts in formulating educational programs; habit formation; individual differences as affecting educational and vocational performances; the psychology involved in the interview and in personality as affecting development of teachers as vocational and educational leaders. Special attention is given to the study of mental ability, attitude, interests, and aptitudes of the groups affected by education in its various phases.

Ed. 33.—Introduction to Industrial Education—Semester 1 (1 and 6) 3 cr. (Tate).

This is an introductory course required of all students pursuing Industrial Education. The chief purpose of this course is to orient the students in the field of Industrial Education. Special emphasis will be placed on familiarizing the students with the needs for vocational education in trades and industries in South Carolina. Students are expected to spend from one to two afternoons each week in the practice departments and visiting schools and classes in the State.

Ed. 35.—Introduction to Education—Semester 1 (3 and 0) 3 cr.

A general introductory course required of all students majoring in Education. This course takes up a survey of the general field of Education for the purpose of giving the student a background for more specialized courses in Education.

Ed. 40.—Practice Teaching in Agriculture—Semester 2

(0 and 15) 5 cr. (Crandall, Ayers, McLean, Duggan).

Each student is required to assume the work and responsibility of a teacher of agriculture in a local community. Students are expected to organize and conduct part time, evening class, and day unit courses in addition to the all-day program. Students are to spend five afternoons each week in the practice departments, and teach two evening classes each week for ten weeks.

Ed. 41.—Principles of Vocational Education—Semester 1

(1 and 9) 4 cr. (Crandall, Ayers, McLean, Duggan).

In this course emphasis is placed on the participation of students in all possible phases of the work of a teacher of agricul-

ture in a local community. Students participate in organizing and conducting all-day, part-time, evening and day unit classes. Students are held responsible for definite phases of community and promotional work. Instruction in principles and methods of teaching is given in connection with student's participation. Students are expected to spend two afternoons each week in the practice departments.

Ed. 42.—Methods in Agricultural Education—Semester 2
(3 and 0) 3 cr. (Crandall).

The developing of teaching material in vocational agriculture receives special emphasis in this course. Students are expected to make careful analyses of conditions and practices of farming in a local community as one of the chief sources of subject matter.

Ed. 43.—Methods in Industrial Education—Semester 1
(0 and 12) 4 cr.

Study of educational needs of textile employees, job analysis of certain jobs in cotton mill, study of mill as a whole, construction of courses to be taught in vocational classes and schools. Students are to spend one full day each week in mills and schools.

Ed. 44.—Principles of Teaching—Semester 2 (3 and 0) 3 cr.
(Tate).

Special emphasis is placed in this course on the teaching of problems in the trades and industries in South Carolina. Such topics as the project method of teaching, lesson types, teaching exercises, type studies, and lesson planning are studied in this course.

Ed. 45.—Special Methods in Teaching High School Subjects—
Semester 1 (3 and 0) 3 cr.

Among the topics to be considered are the objectives of different high school subjects, course building, methods of evaluating instruction in high school subjects, comparative study of text books and laboratory manuals, and the adaptation of high school courses to local conditions.

Ed. 46.—Practice Teaching in Industrial Education—Semester 2
(0 and 15) 5 cr. (Tate, Booker).

Students who pursue the curriculum in Industrial Education are required to observe and teach in evening and part-time classes in trades and industries. Students are expected to organize part-time, general continuation, and evening classes in addition to the work in connection with the all-day program. Students are to spend five afternoons each week in the practice departments, and teach two evening classes each week for ten weeks.

Ed. 48.—**Principles of Teaching**.—Semester 2 (3 and 0) 3 cr.
(Tate).

This is a course treating of the principles of teaching high school subjects. Such topics as the project method of teaching; lesson types; teaching exercises—recitation, laboratory, supervised study, demonstration, field trip, examinations, type studies, and lesson planning, are studied in this course.

Ed. 52.—**Practice Teaching**.—Semester 2 (0 and 15) 5 cr.
(Tate, Booker).

This course is required of all students in Arts and Science who elect a major in Education. Students in Arts and Science observe and teach in high school departments in public schools located near the College.

ELECTRICAL ENGINEERING

MR. DARGAN

MESSRS: RHODES AND WILSON

E. E. 30.—**Textile Electrical Machinery**.—Semester 2 (2 and 2)
2 2/3 cr. Jr. VII, VIII, XI. (Rhodes, Wilson).

Prerequisite: Physics 21, 22.

A course in the essential principles of electrical equipment used in the textile industry, includes two hours per week of laboratory practice.

E. E. 31.—**Direct Current Machinery**.—Semester 1 (5 and 0)
5 cr. Jr. VI, IX. (Rhodes).

Prerequisites: Math 21, 22, Physics 21, 22.

A course embracing the principles and characteristics of direct current machinery and auxiliaries.

E. E. 32.—**Alternating Current Circuits**.—Semester 2 (5 and 0)
5 cr. Jr. VI. (Rhodes).

Prerequisite: E. E. 31.

A physical and mathematical development of alternating current circuits embodying a thorough drill in the standard methods of solution.

E. E. 33, 34.—**Electrical Measurements**.—Semesters 1 and 2
(0 and 3) 1 cr. Jr. VI, IX. (Rhodes, Wilson).

Prerequisites: Math. 21, 22, Physics 21, 22, with E. E. 31.

A laboratory study of electric and magnetic circuits, and representative types of electrical instruments including alternating current circuits and instruments in the second semester.

E. E. 35, 36.—**Dynamo Laboratory**—Semesters 1 and 2
(0 and 2) 2/3 cr. Sr. IX. (Dargan, Wilson).

Prerequisite: Should parallel course E. E. 53.

A course similar to E. E. 45, 46 but planned especially for students in mechanical engineering.

E. E. 41, 42.—**Alternating Current Machinery**—Semester 1
(3 and 0) 3 cr. Sr. VI. (Dargan).

Prerequisites: E. E. 32; E. E. 34.

A comprehensive treatment of the theory, characteristics and uses of the leading types of generators, motors, transformers, converters and other electric power equipment; problems in application engineering.

E. E. 43.—**Electric Circuits**—Semester 1 (2 and 0) 2 cr. Sr. VI.
(Rhodes).

Prerequisites: All junior courses in E. E.

An advanced study of the principles of electrostatics and electromagnetics in their relations to apparatus and equipment.

E. E. 44.—**Power Transmission**—Semester 2 (2 and 0) 2 cr.
Sr. VI. (Rhodes).

Prerequisite: E. E. 43.

An application of the principles of E. E. 43 to the problems of transmission and distribution of electric power.

E. E. 45, 46.—**Dynamo Laboratory**—Semesters 1 and 2
(0 and 4) 1 1/3 cr. Sr. VI. (Dargan, Wilson.)

Prerequisites: All junior courses in E. E.

A laboratory course affording the student opportunity to determine for himself the actual operating characteristics of commercial machinery and control apparatus.

E. E. 47, 48.—**Electrical Design**—Semesters 1 and 2 (0 and 2)
2/3 cr. Sr. VI. (Rhodes).

Prerequisites: Should be paralleled by Senior courses in E. E.

Problems in design affording the student opportunity to undertake projects involving the various principles of his courses in science and engineering.

E. E. 51.—**Elements of Electrical Engineering**—Semester 1
(2 and 2) 2 2/3 cr. Sr. V. (Wilson).

Prerequisites: Physics 24, 26.

A study of electrical equipment as related to civil engineering applications. Includes two hours per week of laboratory practice.

E. E. 53.—Alternating Current Machinery—Semester 1
(3 and 0) 3 cr. Sr. IX. (Rhodes).

Prerequisites: E. E. 32; E. E. 34.

A study of the principal types of alternating current machines and auxiliaries with special emphasis given to the characteristics of these machines as related to the solution of problems in power engineering.

E. E. 54.—Radio Communication—Semester 2 (2 and 0) 2 cr.
(Rhodes).

This course embraces the essential principles of modern radio reception and transmission. Includes a series of laboratory experiments.

E. E. 55.—Thermionic Tubes—Semester 1 (2 and 0) 2 cr.
(Rhodes).

A study of the characteristics of vacuum tubes for amplification, rectification and transformation of electric power., includes a series of laboratory experiments.

E. E. 56.—Electrical Power Plants.—Semester 2 (2 and 0)
2 cr. (Dargan.)

A brief study of the applications of electrical equipment to power plants, etc.

ENGLISH

MR. DANIEL

MESSRS: BRADLEY, LANE, RHYNE, KINARD, RANKIN,
CARVER AND METCALFE.

English A and B.—Semesters 1 and 2 (2 and 0) 0 cr.

All freshmen, on entering Clemson College, must take an examination, designed to test their ability to write English without gross errors in spelling, grammar, diction, sentence-structure, and punctuation. The papers submitted will be rated as either "passes" or "not passes." Those students whose papers are not rated as passable must take English A and B before they are permitted to take English 11 and 12. English A and B is a non-credit course which gives a review of fundamental English.

Provisions are made for the transfer of a student from English A and B to English 11 and 12 and vice versa. This to be done on recommendation of the student's instructor and the approval of the director and registrar.

English 11, 12.—Composition and American Literature—Semesters 1 and 2 (2 and 0) 2 cr. Fr. All courses. (Rankin, Carver, Metcalfe).

This course, which presupposes a knowledge of English grammar and syntax, gives training in composition and rhetoric, and letter writing.

The lives of the chief writers, a study of selections from each, and a class-room reading of many other selections, make up the principal work of the course in literature.

Supplementary Reading: A supplementary reading course embracing some of the best works of the leading authors is required, and written reports are made upon these.

Text-books: Composition and Rhetoric to be selected; "Century Collegiate Handbook of Writing"; Webster's "Secondary School Dictionary" or a book of higher grade.

English 21, 22.—Literature and Advanced Composition—Semesters 1 and 2 (2 and 0) 2 cr. So. All courses.

(Bradley, Lane and Kinard).

Prerequisites: English 11, 12.

This is a survey course comprising an intensive study of the types of literature from outstanding authors and is used as a basis for advanced composition. Many of the themes are discussed in class, and consultations are held with students for individual discussion.

Text-books: "Century Collegiate Handbook of Writing"; Webster's "Secondary School Dictionary" or book of higher grade.

English 31.—Public Speaking—Semesters 1 (2 and 0) 2 cr. All courses. (Daniel).

Prerequisites: English 21, 22.

In this course in public speaking a text-book is used for a study of the theory of the subject, but most of the work is practical, stressing correct pronunciation, clear enunciation, and direct natural delivery. Selections are memorized for practice. Original speeches are prepared and delivered. Extemporaneous speaking is required.

Two periods a week for the first semester for all courses except Agriculture; one period a week for session for agricultural courses.

English 31a, 32a.—Semesters 1 and 2 (1 and 0) 1 cr. Jr. 1. For agricultural students.

English 32.—Business Law—Semester 2 (2 and 0) 2 cr. (Daniel).

This course in business law seeks to fix legal principles in the student's mind, to lead him to realize the limitations of the

legal knowledge of the layman, to give definite ideas as to how laws operate in actual practice, to prepare him to carry on business transactions with such care that he may avoid legal difficulties.

The course begins with a brief survey of the origin, purpose and development of laws; then takes up a study of contracts, sales, agency, negotiable instruments, partnership, corporations, personal property and real property.

Problems from actual cases are discussed in class, the students taking opposing sides. Contracts, notes, mortgages, checks and other papers are written and discussed.

Text-book: "Business Law"—Conyington-Bergh

English 43, 44.—**Journalism, Dramatic Literature**—Semesters 1 and 2 (2 and 0) 2 cr. Sr. Elective. (Daniel)

Prerequisites: English 21, 22.

Journalism: Text-books are used as the basis of the course in Journalism which is designed to train students in the preparation of technical articles for the general reader and to help those who expect to become leaders in industrial and economic life to do occasional writing for newspapers and other publications.

Text-book: "Newspaper Editing and Writing."

Dramatic Literature: The course in dramatic literature gives a brief survey of the development of the drama followed by a study of some of Shakespeare's plays and a modern play. Some time is also devoted to a study of present day literature. Occasional papers are required.

English 47, 48.—**Course in Middle English: Chaucer and Langlands**—Semesters 1 and 2 (2 and 0) 2 cr. (Bradley).

Prerequisites: English 21, 22.

The course in Middle English consists (1) of a comparative study of the poetry of Chaucer and Langland as to outstanding differences of versification, etymology, and attitude toward the clerical abuses of the period, and (2) a detailed study of the Canterbury Tales with respect to literary characteristics and verse form.

Text to be chosen.

English 41.—**The Essay**—Semester 1 (2 and 0) 2 cr.
(Lane.)

Prerequisite: Eng. 31.

This course is for students who desire general practice in writing. It is designed to develop accuracy in the mechanics of writing as well as a degree of fluency in composition. Attention is given to purely creative writing.

English 42.—**The Short Story**.—Semester 2 (2 and 0) 2 cr.
(Lane).

Prerequisite: Eng. 31.

A study of the modern short story models; the technique of the short story; and the development of plot from basis ideas. Two stories will be required during the semester.

GEOLOGY AND MINERALOGY

MR. CALHOUN

Geol. 21.—**Agricultural Geology**.—Semester 1 (3 and 0) 3 cr.
So. I, III. (Calhoun).

In this course geology is considered in its practical relation to agriculture.

Geol. 23, 24.—**General Geology**.—Semesters 1 and 2 (3 and 0)
3 cr. So. III. (Calhoun).

A course in general geology for students in the arts and science group. The first semester will be devoted to structural and dynamic geology; the second semester, which will be elective, to the principles of historical geology.

Geol. 31.—**Engineering Geology**.—Semester 1 (2 and 0) 2 cr.
Jr. V. (Calhoun).

A brief course in which the practical application of geology to engineering is emphasized. Topographical and geological maps are used in connection with the text book.

Text-book: "Elements of Engineering Geology"—Ries and Watson.

Geol. 33, 34.—**Mineralogy**.—Semesters 1 and 2 (2 and 2)
2 2/3 cr. Jr. IV. (Calhoun).

A comprehensive course in crystallography, physical and chemical mineralogy and descriptive and determinative mineralogy.

Geol. 40.—**Economic Geography**.—Semester 2 (3 and 0) 3 cr.

A course for men electing Agricultural Economics. Special attention will be placed upon world conditions.

Geol. 41.—**Chemical Geology**.—Semester 1 (2 and 0) 2 cr.
Sr. IV. (Calhoun.)

In this course structural geology, the theory of ore deposits, and the economic side of geology are emphasized. Special stress is laid upon the action of underground water in forming ores and veins. The theories of the formation of various classes of rocks are considered and special attention is given to that side of historical geology which enables the chemists to recognize cer-

tain horizons which carry minerals and ores of economic importance.

Text-book: "Elements of Engineering Geology"—Ries and Watson.

Geol. 42.—**Meteorology**—Semester 2 (2 and 0) 2 cr.
(Calhoun).

A course designed to give the student an adequate conception of the use of meteorological instruments, weather maps, and the general principles of meteorology and climatology as applied to the growing of crops.

Text-book: "Agricultural Meteorology"—Smith.

HISTORY

MR. HOLMES

MESSRS: BREARLEY AND EPTING

History 11.—**Citizenship**—Semesters 1 or 2. (3 and 0) 3 cr.
Fr. I. (Holmes and Epting).

This is an orientation course designed to give a survey of the major social institutions and problems with emphasis upon government as a means by which social problems may be solved.

Supplementary and collateral reading is required.

History 13.—**Political Science**—Semester 1 (2 and 0) 2 cr.
Fr. III, IV, V, VI, VII, VIII, IX. So. II.
(Holmes, Brearley and Epting).

This course traces the growth of the Constitution and develops the functions of the national government and of political parties. Some attention is given to comparative government.

Supplementary and collateral reading, with written reports is required.

History 14.—**American Economic History**—Semester 2.
(2 and 0) 2 cr. Fr. III, IV, V, VI, VII, VIII, IX. So. II.
(Holmes, Brearley and Epting).

This course is a brief survey of the economic background of colonization, the Revolution, wars, agriculture, public finance, commerce and with special emphasis upon the Industrial Revolution in the United States and its results.

Reports upon problems are required.

History 15, 16.—**History of Civilization**—Semesters 1 and 2
(3 and 0) 3 cr. So. II (Holmes.)

This is a rapid survey by lectures, recitations and reading of the ancient, mediaeval and modern world.

HORTICULTURE

MR. MUSSER

MESSRS: NEWMAN, RAWL AND EZELL

Hort. 12.—**Vegetable Gardening**—Semester 2 (2 and 2)
2 2/3 cr. Fr. I. (Ezell).

Principles and practices relative to the production of vegetables for home use; construction and management of cold frames and hotbeds. Practical work in planting and caring for a garden.

Text-book: "Vegetable Gardening."—Watts.

Hort. 31.—**Fruit Growing**—Semester 1 (2 and 2) 2 2/3 cr.
(Ezell).

General study of fruits with particular reference to the home orchard sites, soils, propagation, planting, pruning, spraying and varieties.

Text-book: "Productive Orchardng"—Sears.

Required equipment—One pair hand pruning shears, one budding knife and one pruning saw.

Hort. 41.—**Systematic Pomology and Small Fruits**—Semester 1 (2 and 2) 2 2/3 cr.

Systematic Pomology—1st half 1st semester.

Small Fruits—2nd half 1st semester.

Systematic includes the classification, description, and nomenclature of native and sub-tropical fruits; identification with reference to relationship and natural classification of varieties and judging and displaying fruits.

Text-book: "Systematic Pomology"—Hedrick.

Small Fruits includes the propagation, culture, harvesting, and marketing of the blackberry, dewberry, grape, raspberry, strawberry, and other small fruits.

Text-book: "Productive Small Fruit Culture"—Sears.

Hort. 42.—**Commercial Pomology**—Semester 2 (2 and 2)
2 2/3 cr. (Rawl).

Commercial pomology will deal with practical problems pertaining to fruit growing; establishment and management of large commercial orchards, inter-cropping, cover crops, marketing, etc. Commercial orchards visited.

Text-book: "Textbook of Pomology"—Gourley.

Supplemented by lectures and assigned readings.

Required equipment: One pair pruning shears, saw, and budding knife.

References: "Fundamentals of Fruit Growing"—Gardner, Bradford and Haslser"; "Fruit Growing"—Chandler.

Hort. 43.—Plant Propagation and Nursery Management—
Semester 1. (2 and 2) 2 2/3 cr. (Newman).

This course includes the study of methods of propagating fruit trees, shrubs and the various kinds of flowering plants. The student is given practical instruction in the propagation of these plants in the field as well as in the greenhouse. The nursery consists of plantings of various kinds of deciduous and evergreen shrubs as well as the pome and stone fruits.

Text-book: "The Nursery Manual"—Bailey.

Hort. 44.—Landscape Gardening—Semester 2 (2 and 2)
2 2/3 cr. (Newman).

A study of the principles of landscape art with reference to the improvement of home and school grounds and park areas; mapping, designing and a study of decorative plants, their identification and adaptation to landscape work.

Hort. 45-46—Truck and Market Gardening—Semesters 1 and 2
(2 and 2) 2 2/3 cr. (Musser).

Principles and practices of commercial vegetable growing on a large scale as well as forcing crops in the greenhouse and in frames. Special attention is given to the trucking practices in this state, with particular reference to the development and management of truck farms and market gardens, planting, cultivation, fertilization, harvesting, grading, and marketing. This course combines both systematic and commercial study, commercial sections are visited.

Text-book: "Vegetable Forcing"—Watts; "Vegetable Crops" Thompson. Supplemented by lectures and assigned readings.

Hort. 50, 51.—Special Problems—Semesters 1 and 2
(1 and 0) 1 cr. Sr. I.

Special subject requiring independent investigations by students specializing in horticulture. Results submitted in written form.

MATHEMATICS

MR. MARTIN

MISS. SHANKLIN, HUNTER, JOHNSTONE, NICHOLSON

Math. 11.—Plane Trigonometry—Semester 1 (5 and 0) 5 cr
Fr. II, IV, V, VI, VII, VIII, IX, X, XI.

(Johnstone, Nicholson).

Prerequisites: Algebra and Plane Geometry.

This course covers plane trigonometry supplemented by numerous related problems and exercises.

The first month of this semester will be devoted to a rapid review of the fundamental principles of Algebra with especial emphasis on the subjects which come in subsequent courses in Mathematics.

Math. 12.—**Analytic Geometry**—Semester 2 (5 and 0) 5 cr.
Fr. II, III, IV, V, VI, VII, VIII, IX, X, XI.

(Johnstone, Nicholson).

Prerequisite: Mathematics 11.

This course comprises a study of cartesian and polar systems of coordinates, discussion and construction of loci, the straight line, transformation of coordinates, the circle, parabola, ellipse, hyperbola, general equation of second degree involving two variables, tangents and normals, higher plane curves, equation of the plane, the straight line in space and surfaces of the second order.

Text-book: "Analytic Geometry"—Wilson and Tracy.

Math. 15.—**Mathematics for Agriculture**—Semester 1 (3 and 0)
3 cr. Fr. 1. (Shanklin.)

This course embraces the study of numerical calculations, algebraic processes, dairy problems, fertilizer formulas, cement mixtures, graphical representations of statistical data, statistics, progressions, interest, annuities, averages, ratios, correlation, etc.

Math. 17, 18.—**Mathematics for Science**.—Semesters 1 and 2
(3 and 0) 3 cr. Fr. III, X.

This is a course especially planned to meet the needs of freshmen taking the Arts and Science and the Pre-Medical Courses. The work will cover such subjects as ratios, proportion, percentages, elementary statistics, correlations, the use of logarithms, etc.

Math. 21.—**Differential Calculus**—Semester 1 (5 and 0) 5 cr.
So. II, IV, V, VI, VII, VIII, IX. (Martin, Hunter).

Prerequisite: Mathematics 12.

A study of the differentiation of algebraic and transcendental functions, successive differentiation and development of functions, functions of two variables, tangents, normals, and asymptotes, applications of the derivative in mechanics.

Text-book: "Differential and Integral Calculus"—Osborne.

Math. 22.—**Integral Calculus**—Semester 2 (5 and 0) 5 cr.
So. II, IV, V, VI, VII, VIII, IX.

(Martin, Hunter).

Prerequisite: Mathematics 21.

This course in integral calculus gives instruction in elementary forms of integration, integration of rational fractions, the definite integral, successive reductions, integration of functions of two variables, geometric applications, multiple integrals, and practical problems arising in engineering subjects.

Text-book: "Differential and Integral Calculus"—Osborne.

MECHANICAL ENGINEERING

MR. EARLE

MESSRS: TUCKER, CARPENTER, SHUBERT*, JOHNSON,
MARSHALL, FREEMAN**, SAMS***.

M. E. 11, **Agricultural Shop Forge**—Semester 1 (0 and 2)
2/3 cr. Fr. I. (Johnson).

This course is arranged to suit the needs of the agricultural student—with talks on the materials used.

This course is also given in the second semester.

Text-book: "Farm Blacksmithing"—Frieese.

M. E. 13, 14.—**Forge Work**—Semesters 1 and 2 (0 and 2)
2/3 cr. Fr. V, VI, VII, VIII, IX, XI. (Johnson).

This course embraces all principles of forge work that will acquaint the student with the best methods of up to date practice relating to engineering. The work is in wrought iron and tool steel forgings. About one-third of the time is given to lecture work and two-thirds to practice.

The division is amply equipped to teach this subject thoroughly.

M. E. 16.—**Agricultural Shop, Woodwork**—Semester 2
(0 and 2) 2/3 cr. Fr. I. (Marshall).

This course in woodwork is planned for agricultural students to familiarize them with the more common tools used in the building and repair of farm equipment.

This course is also given in the first semester.

M. E. 17, 18.—**Woodwork**—Semesters 1 and 2 (0 and 2)
2/3 cr. Fr. V, VI, VII, IX, XI. (Marshall).

This course includes bench and lathe work and is designed to familiarize the student with tools and machinery commonly used in woodwork.

M. E. 21.—**Woodwork**—Semester 1 (0 and 2) 2/3 cr.
So. VI, VII, IX. (Marshall).

Prerequisites: Shop work 17, 18.

This course consists of exercises in pattern making with special reference to the principles involved. It is planned to outline to the student a general survey of the most suitable materials, special tools, and fundamental principles involved in this part of the business of machinery manufacturing.

This work is also given during the second semester.

*Resigned February first.

**Succeeds Professor Shubert.

***Succeeds Instructor Freeman.

M. E. 22.—**Foundry**—Semester 2 (0 and 2) $2\frac{2}{3}$ cr.

So. VI, VII, IX. (Johnson).

This course gives the student a broad view of this work as it relates to industry from the engineering standpoint. Materials used are cast iron and nonferrous metals.

This work is also given during the first semester.

The shop space and equipment is ideal for the teaching of this subject.

M. E. 31, 32.—**Mechanics**—Semesters 1 and 2 (3 and 0) 3 cr.

Jr. VI, IX, XI.

(Tucker).

Prerequisites: Math. 21, 22; Physics 22, 24.

The principles of force systems, equilibrium, center of gravity, friction, moment of inertia and kinetics and their application to engineering.

M. E. 31.5, 32.5.—**Industrial Arts**—Semesters 1 and 2 (0 and 2) $2\frac{2}{3}$ cr.

This course is arranged for the teacher in Mechanic Arts and those looking towards the trades, alternates with pattern making.

Text-book: "Foundry Work."—Wendt.

M. E. 33, 34.—**Machine Shop**—Semesters 1 and 2 (0 and 4) $1\frac{1}{3}$ cr. So. XI. Jr. VI, VII, IX. (Freeman).

A course in the fundamental principles of machine shop practice as related to engineering work, embracing the use of tools and machines and the practical study of the composition, properties, uses, and methods of heat treatment of the various metals and their alloys.

M. E. 35, 36.—**Mechanical Engineering**—Semesters 1 and 2. (3 and 0) 3 cr. Jr. VI, IX. (Carpenter).

Prerequisites: Math 21, 22.

A general survey of the field of power engineering including fuels, combustion, steam, boilers and boiler room auxiliaries, steam engines and turbines with their auxiliaries, internal combustion engines, elementary thermodynamics of the steam and gas cycle.

M. E. 37, 38.—**Mechanical Engineering**—Semesters 1 and 2 (3 and 0) 3 cr. Jr. V, XI. (Carpenter.)

Prerequisites: Math. 21, 22.

Study of fuels, combustion, steam, boilers and boiler room auxiliaries; elementary thermodynamics of the steam and gas cycle.

M. E. 37.5, 38.5.—**Mechanical Laboratory**—Semesters 1 and 2
(0 and 2) $2\frac{2}{3}$ cr. Jr. V, XI.
(Carpenter).

Calibration of thermometers, gauges, study and use of indicators, calibration of nozzles and wiers, coal and gas analysis, tests of lubricating oils. Engine and turbine tests.

M. E. 39, 30.—**Mechanical Laboratory**—Semesters 1 and 2
(0 and 2) $2\frac{2}{3}$ cr. Jr. VI, IX.

Prerequisites: Physics 22, 24.

Calibration of thermometers, gauges, study and use of indicators, calibration of nozzles and wiers and tests of simple hydraulic machinery. Coal and gas analysis, tests of lubricating oils. Simple engine tests.

M. E. 41.—**Mechanical Engineering**—Semester 1 (3 and 0)
3 cr. Sr. VI.

Prerequisites: M. E. 35, 36.

A study of the steam turbine and power plant equipment.

M. E. 43, 44.—**Mechanical Laboratory**—Semesters 1 and 2
(0 and 4) $1\frac{1}{3}$ cr. Sr. IX.

Prerequisites: M. E. 13, 14.

Efficiency and economy of steam engine, turbines, internal combustion engines, condensers, pumps, refrigerating machinery. In this course the heat balance of power plants is taken up and tests are made on equipment at power station and pumping stations.

M. E. 45.—**Mechanical Laboratory**—Semester 1 (0 and 2)
 $2\frac{2}{3}$ cr. Sr. VI.

Prerequisites: M. E. 31, 32.

Efficiency and economy tests, stem engines, steam turbines, boilers, gas engines, pumps, condensers, refrigerating machinery, etc.

M. E. 46.—**Gas Engines**—Semester 2 (0 and 2) $2\frac{2}{3}$ cr. Sr. IX
Prerequisite: M. E. 38, or M. E. 38.5.

Thermodynamics of the internal combustion engine, study of fuels, combustion, ignition, efficiency and economy.

M. E. 47, 48.—**Power Plants**—Semesters 1 and 2 (3 and 0)
3 cr. Sr. IX. (Earle).

Prerequisite: M. E. 38.5.

A critical study of fuels and combustion, heat balance, power plant equipment including steam boilers, prime movers and their auxiliaries.

M. E. 49.—Heating and Ventilating—Semester 1 (2 and 0)
2 cr. Sr. IX. (Carpenter).

Prerequisite: M. E. 38 or M. E. 38.5.

Principles of heat and ventilation, hot-air, steam and hot water heating systems; methods of ventilation.

M. E. 50.—Refrigeration—Semester 2 (0 and 2) $2\frac{2}{3}$ cr.
(Earle).

Prerequisites: M. E. 37, 38 or M. E. 35, 36.

Theory of refrigeration, study of the types of ice making and refrigerating machinery; management and economy of plants.

M. E. 51.—Mechanics of Materials—Semester 1 (3 and 0)
3 cr. Sr. VI, IX. (Tucker).

Prerequisites: M. E. 31, 32.

See C. E. 32.

M. E. 53, 54.—Design—Semesters 1 and 2 (0 and 2) $2\frac{2}{3}$ cr.
Sr. IX. (Carpenter).

Prerequisites: Drawing 32; M. E. 35, 36.

An analytical and graphical study of the fundamental principles of construction of various classes of certain machinery such as the steam engine, pumps, steam turbines, etc., by the solution of certain problems in design.

M. E. 55, 56.—Industrial Arts—Semesters 1 and 2 (0 and 2)
 $2\frac{2}{3}$ cr. (Marshall, Johnson, Freeman).

This course is designed for students who wish to teach. Special emphasis is laid on good form in the use of tools and machinery. A proportional part of the course is given to the policies and practices in the organization, administration and supervision of industrial courses.

MILITARY SCIENCE

LIEUTENANT COLONEL COLE

CAPTAINS HIGGINS AND PENROSE, LIEUTENANTS JOHNSON,
AND BALCAR; SERGEANTS NARAMOR AND STERN

M. S. 11, 12, Military Science and Tactics—Semester 1
(0 and 3) 1 cr. Semester 2 (1 and 2) $1\frac{2}{3}$.
(Cole and Naramor).

Freshmen class—all courses.

This course includes the theory and practice of rifle marksmanship, hygiene and first aid, physical exercise for the correction of defects in posture, and lessons in command and leadership and military courtesy.

Text-book: National Service R. O. T. C. Manual, Vol. I.

M. S. 21, 22.—**Military Science and Tactics**—Semester 1
(0 and 3) 1 cr. Semester 2 (1 and 2) 1 2/3 cr.
(Cole and Stern).

Prerequisite: Military Science 12.

Sophomore class—all courses.

This course consists of instruction in command and leadership, the duties of junior leaders, in drills, ceremonies, guard duty in field and garrison, use of the automatic rifle, musketry and scouting and patrolling.

Text-book: National Service R. O. T. C. Manual, Vol. II.

M. S. 31, 32, **Military Science and Tactics**. Semester 1 (2 and 3)
3 cr. Semester 2 (3 and 2) 3 2/3. (Higgins and Johnson).

Prerequisite: Military Science 22.

Junior Class R. O. T. C., Elective.

This course consists of instruction in the use of standard and special maps, map distances and elevations, and in the making of special maps by improvised methods. It also includes studies of field engineering and combat principles, detailed study of the machine gun, and further study in command and leadership, particularly training and application in the more advanced duties of non-commissioned officers in drill and ceremonies.

Text-book: National Service R. O. T. C. Manual, Vol. III.

M. S. 33, 34.—**Military Science**—Semesters 1 and 2 (0 and 3)
1 cr. Jr. all courses.

M. S. 41, 42.—**Military Science and Tactics**—Semester 1^{*}
(2 and 3) 3 cr. Semester 2 (3 and 2) 3 2/3. cr.
(Penrose and Balcar).

Prerequisite: Military Science 32.

Senior Class R. O. T. C. Elective.

This course comprises the study of infantry weapons, military history and the National Defense Act, administration and military law, the rules of land warfare, combat principles and tactics, the duties of commissioned officers in command of the platoon and company.

Text-book: National Service R. O. T. C. Manual Vol. IV.

M. S. 43, 44.—**Military Science**—Semesters 1 and 2 (0 and 3)
1 cr. Sr. all courses.

Class rooms and equipment: The military department has three class rooms and an armory for the storage of equipment. Class rooms are completely equipped with sand tables, drawings, charts and maps for the instruction of the individual class. In addition to the essential equipment for the individual the college has machine guns, 37 mm. guns and trench mortars, automatic rifles, all loaned by the government. All the equipment required for class use, such as drawing boards, paper, pamphlets, etc., are furnished the student.

MODERN LANGUAGE

MR. RHYNE

Fr. 11, 12.—**Beginner's French Course**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

A beginner's course in French; the fundamentals of grammar with emphasis on pronunciation and the learning of idioms, conversation and dictation. In the second semester a reader will be used.

Fr. 21, 22.—**Second-year French**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

Review of grammar, with especial attention to irregular verbs. Conversation and dictation continued. Prose readings from such authors as Balzac, Daudet, Dumas, Hugo, Loti, Maupassant and Merimee.

Fr. 31, 32.—**Rapid Readings in Scientific French**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

The authors for reading are selected according to the subject in which the students are most interested.

Ger. 11, 12.—**Beginner's German**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

The essentials of German grammar. Stress is laid on pronunciation, conversation, and drill in the fundamental constructions. Dictation is given throughout the year. In the second semester an elementary reader is used.

Ger. 21, 22.—**Second-year German**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

Review of grammar. Conversation and dictation continued. Easy lectures in German. Prose readings from such authors as Baumbach, Freytag, Hauff, Storm and Wildenbruch.

Ger. 31, 32.—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

Rapid readings in German prose, literary and scientific. A survey of the work of some of the greatest Germans in the fields of letters and science.

Sp. 11, 12.—**Beginner's Spanish**—Semesters 1 and 2 (3 and 0) 3 cr. (Rhyne).

The essentials of grammar. Pronunciation and drill in the common idioms. Toward the end of the first semester the reading of Spanish texts will be taken up. For the whole of the second semester students taking the course will be expected to subscribe for at least two days a week to the Spanish Daily *La Prensa*.

PHYSICAL EDUCATION

MR. GEE

MESSRS: CODY AND CARSON

P. E. 11, 12—Semesters 1 and 2 (0 and 2) 2/3 cr

Physical training is required of all first year students; one two-hour period per week. Physical Ed. 11 will be devoted to such athletic activities as will contribute to the health and physical welfare of each freshman. The work consists of gymnastics and competitive games.

Election of specialized sports—football, baseball, basket ball, track, swimming—may be made by all cadets who have required standard of physical development.

Corrective gymnastics will be made an important part of the course.

PHYSICS

MR. GODFREY

MESSRS: STILL, REED AND RAWINSON

Physics 11, 12.—**General Physics**—Semesters 1 and 2 (3 and 2) 4 cr. Fr. II, V, VI, VII, VIII, IX, XI.

(Still, Reed, Rawlinson.)

Prerequisites: Algebra, through Quadratics, Plane Geometry.

This course is for engineering students and covers the fundamental principles of physics in mechanics, heat, magnetism, electricity, and light as given in the text. In the laboratory elementary quantitative experiments in these subjects are assigned. Carefully prepared reports are required. Mimeographed notes are used as a guide, but the student is expected to develop correct methods of observation, make accurate records and present clear, concise reports. Curve plotting is given special attention.

Text-book: "A Textbook of Modern Physics"—Weld and Palmer.

Physics 13, 14.—**General Physics**—Semesters 1 and 2 (3 and 2) 4 cr. Fr. III, IV, V, X. (Still, Rawlinson).

This course covers the same subjects as the preceding but more attention is given to molecular physics and light, and less detailed study is made in mechanics and electricity. There are some changes in the topics covered in the laboratory course, but the same general plan is used.

Text-book: "Physics"—Stewart.

Physics 21.—**Mechanics and Light**—Semester 1 (3 and 0) 3 cr.
So. VI, IX. (Godfrey).

Prerequisites: Physics 11, 12, Mathematics 11, 12.

This course is an introduction to the work in the engineering courses that follow. Notes on lectures are required, and much problem work is given.

Text-book: "Problems in Physics"—Henderson.

Physics 22.—**Electricity and Magnetism**—Semester 2 (3 and 0)
3 cr. So. VI, IX. (Godfrey).

This is a continuation of the preceding course with a study of electricity and magnetism. A thorough study of direct current circuits is made and many practical problems are solved.

Text-book: "Electrical Engineering"—Vol. 1—Dawes.

Physics 23, 24.—**Laboratory Physics**—Semesters 1 and 2
(0 and 2) 1 cr. So. V, VI, IX. (Godfrey, Reed)

This is an advanced laboratory course in which modern experimental methods are used in the measurement of several physical constants. The operation of electrical measuring instruments for direct currents is studied and some circuit tests are given.

Text-book: Mimeographed Notes.

Physics 25, 26.—**Mechanics, Electricity, Magnetism and Light**
Semesters 1 and 2 (2 and 0) 2 cr. So. V. (Godfrey, Reed)

This course in the civil engineering curriculum is similar to Physics 21, 22, but covers only the essentials to this curriculum. Notes on lectures are required and problem work is assigned. It is taken in connection with laboratory course 23, 24; but some changes are made in the topics studied in the laboratory.

Text-book: "Problems in Physics"—Henderson.

Physics 29.—**General Physics**—Semester 1 (1 and 4) 3 cr. So. I.
(Still).

This course is offered to students in agriculture and includes a laboratory study of fundamental principles that are applied in this field. Carefully prepared reports are required and references to standard works are assigned for outside study. As far as possible topics for the experiments are chosen by the students. Smith's "Elements of Applied Physics" is used regularly for reference.

Physics 31, 32.—**Advanced Physics**—Semesters 1 and 2
(2 and 2) 3 cr.
(Godfrey).

This course is planned to give the student some information regarding more recent developments and methods in Physics and

the results of recent investigations. Some experiments and demonstrations in the physics of the electron are included.

Physics 33.—Elementary Descriptive Astronomy—Semester 1 or 2 (2 and 0) 2 cr. Sr. V. (Godfrey).

Prerequisites: Physics 21, 23.

This course is repeated second semester.

This is a brief course based upon the text.

Text-book: "Astronomy"—John Charles Duncan.

Division Rooms and Equipment: The Physics Division is located on the ground floor of the chapel building. The two lecture rooms, each seating eighty-four students, are equipped with individual tablet arm chairs on a stepped floor and supplied with projection equipment. There are three large laboratories, a dark room, an instrument room, storage room, and a division office room. The lecture rooms and laboratories are equipped with reinforced concrete tables on concrete foundation. They are supplied with gas, water, and air pipe lines throughout and have electrical connection with switchboard in battery and generator room. The division is provided with a great variety of apparatus for both lecture and laboratory purposes to which additions are made each year.

POULTRY HUSBANDRY†

MR. MORGAN

P. H. 12.—Elementary Poultry Husbandry (1 and 2) 1 2/3 cr. Fr. I. (Morgan).

A study of the general principles of poultry production, including the importance and scope of the industry, incubation, brooding, housing, feeding, flock management and parasites and diseases.

P. H. 14.—Advanced Poultry Husbandry—(2 and 2) 2 2/3 cr. (Morgan).

A study of the scope and relation of poultry production to agriculture. The course will include a discussion of the principles of production and the problems and practices of management.

†Courses subject to change.

TECHNOLOGY OF FABRICS†

MR. CHEATHAM

MR. McKENNA.

T. F. 12.—The Textile Industry—Semester 2 (1 and 2)

1 2/3 cr. Fr. VIII, XI. (Cheatham, McKenna).

This work is a continuation of the work given the first semester (Y. M. 11) with some emphasis on fabric construction. The object of the course is to give the student a general back ground for his work which follows as well as to see the industry as a whole. In this course the student will take up a few typical skills. He will also study the duties of weaver, loom fixer, second hand and overseer of weaving.

T. F. 21.—Fabric Construction—Semester 1 (2 and 0) 2 cr.

So. XI. (Cheatham, McKenna).

A study of yarns used in fabrics; yarn calculation; classes of textile fabrics; classes of woven fabrics; method of representing weaves; weaves used in standard fabrics; diameters of yarns; maximum ends and picks per inch; effect of yarn twist; shrinkage and take-up; reed calculations; air space and ends per cent in reeds; cloth calculations.

Text-book: "Technology of Textile Design."—Posselt.

T. F. 22.—Elementary Design—Semester 2 (2 and 0) 2 cr.

So. XI. (Cheatham, McKenna).

Prerequisite: T. of F. 21.

Production of designs representing derivative twills and satins, honeycombs, mock leno, granites, crepe, bedford cords, double cloth, pique, corduroy, velvet, and extra warp design; extra selvage motions, cam designing and top riggings.

Text-book: "Technology of Textile Design".—Posselt.

T. F. 23.—Plain Weaving—Semester 1 (0 and 2) 2/3 cr.

So. XI. (McKenna.)

Instruction in the operation of automatic and non-automatic looms; drawing in warps; warping, winding and slashing.

Text-book: I. C. S. on Slashers and Warpers.

T. F. 24.—Loom Fixing—Semester 2 (0 and 2) 2/3 cr. So. XI.
(McKenna).

A systematic study of the motions of a loom; setting and timing the parts with particular reference to economy in power and supplies; multiple cam setting and production calculations.

Text-book: "Practical Loom Fixing."—Nelson.

†These courses are subject to change.

T. F. 31.—Dobby Designing—Semester 1 (2 and 0) 2 cr.
Jr. VIII, XI. (Cheatham).

Prerequisites: T. of F. 21, 22.

A study of pattern styles; method of combining two or more weaves; ratio of construction for different weaves in patterns; laying out designs when either "ground" or "over-all" is given; drawing in and chain drafts and reed plans; reed, harness and warp calculations. Each student is required to produce ten designs from sketches and cloth specifications.

T. F. 33, 34.—Fabric Analysis—Semesters 1 and 2 (2 and 0)
1 cr. Jr. VIII, XI (McKenna).

Prerequisites: T. of F. 21, 22.

Methods of distinguishing between cotton, wool, silk and linen; finding per cent of different fibers in fabrics; determining amount of size in fabrics; methods of finding yards per pound from small samples; over-all and ground constructions; per cent of warp and filling; warp and filling numbers; finding weave and loom-ing plans. Each student is required to analyze six samples the first semester and ten the second semester.

Required equipment: No. 607 Steel Rule; 1" Pick Glass; Pick Needle.

+These courses are subject to change.

T. F. 35.—Fancy Weaving—Semester 1 (1 and 2) 1 2/3 cr.
(Cheatham).

This course is a combination of practical weaving and loom fixing on dobbies and box looms; a study of dobbie harness setting for various types of patterns; a detailed study of dobbies and box motions, and practice in building dobbie and box pattern chains.

Text-book: I. C. S. on Dobbies; Box Motions; Northrop Looms; Slashers; and Warpers.

T. F. 36.—Fancy Weaving—Semester 2 (0 and 2) 2/3 cr.
Jr. VIII, XI. (Cheatham).

Prerequisites: Technology of Fabrics 11, 12, 13.

This course is a continuation of the study of machinery relating to fancy weaving, such as two-weave motion, two cylinder dobbies, multipliers, and automatic box looms.

T. F. 38.—Dobby Designing—Semester 2 (2 and 0) 2 cr.
(Cheatham).

*Junior or Senior Elective.

Prerequisites: Technology of Fabrics 22, 24, 31.

A continuation of the principles relating to Dobby Design as found in Technology of Fabrics 31. Students will have to make

up designs from sketches drawn to scale. Design fabrics similar to samples but of different construction and weights.

T. F. 41.—Leno Designing and Warp Preparation—Semester 1 (2 and 0) 2 cr. Sr. VIII, IX. (Cheatham).

A study of warping and slashing for gray goods; size mixtures; humidity requirements; color in fabric production; methods of dressing colored warps; loom beam dressing and warping layouts for colored warps; cross weaving on cord and steel doupes.

Text-books: I. C. S. on Leno Weaves & Leno Attachments.

T. F. 42.—Jacquard Designing—Semester 2 (2 and 4) 3 1/3 cr. Sr. XI. (McKenna).

A study of the different types of jacquard machines; types and methods of harness building; laying out designs for different tie ups; card cutting and lacing; method of repeating and machine lacing. Each student will be required to make one design for a specified tie up and to prepare cards therefrom.

Text-book: I. C. S. on Jacquards.

T. F. 43.—Weave Room Methods—Semester 1 (3 and 0) 3 cr. Sr. VIII, IX. (Cheatham).

Organization and laying out of weave room machinery; system of keeping records on typical styles of fabrics; cost finding for different types of fabrics; general weave room management.

General management of weaving mills, including organization and laying out of weaving room and preparatory machinery, cost finding.

T. F. 45, 46.—Pattern Weaving—Semesters 1 and 2 (0 and 2) 2/3 cr. Sr. XI. (Cheatham.)

Practice in putting on dobby, box, and jacquard patterns which have been worked out by the students in courses 31, 41, 42.

T. F. 48.—Knitting—Semester 2 (0 and 2) 2/3 cr. Sr. XI. (Cheatham).

A study of flat and circular machines; spring and latch needles; gauge and needles per inch; functions of all parts of machines; narrowing and widening; splicing and reinforcing; yarns for different gauges; yarn changes, building pattern chain for hose and half hose; transferring and looping, rib knitting; changing the stitch; finishing the hosiery.

T. F. 50, 51.—Project in Weaving—Semesters 1 and 2, 1 cr. Junior or Senior Elective.**

Prerequisites: Technology of Fabrics 42, 46, 48.

NOTE**—T. of F. 50-51 may be combined with Y. M. 50-51 to make a Mill Project.

A selection and study of some fabric to be duplicated. This fabric to be designed, dressed, and woven by the students. Hours as arranged. To be elected with approval of director and instructor.

*For Juniors second semester only.

Division Rooms and Equipment

The equipment for this division occupies three rooms on the top floor of the textile building besides one office and two class rooms.

Knitting Room.—One "K" model Scott and Williams 220 needle hosiery machine; one Hemphill 200 needle "Banner" hosiery machine; one Brinton 176 needle ribber; one Jenckes 176 needle hosiery machine; one Wright Steady Dial looper; one 16-bobbin circular braider; one 13-bobbin flat braider; two Merrow over-seaming machines; one 220 needle Banner knitting machine; 14 Gerhardt Hand Knitters.

Warping and Winding Room.—One Davis and Furber dressing machine; one Entwistle beamer; one Draper ball warper; one Draper beam warper; one Lowell Machine Shop single cylinder slasher; one jack spooler; one Altemus quiller; one Payne skein winder; one Steele 2-drum quiller, one 4-spindle Universal "Lee-son" No. 90 quiller; 1 12-Spindle No. 90 Universal Winder, motor drive.

Weave Room.—Seventeen 14-inch hand looms with 25 harness dobbies; one 40-inch Northrop loom, 16-harness dobby; one 28-inch Northrop loom; steel harness; three 40-inch Mason looms; one Crompton and Knowles 30-inch loom, 20 harness dobby and leno motion; one Crompton and Knowles 30-inch loom, 624-hook Holton Jacquard; one Crompton and Knowles 40-inch "Gem" loom, 4 by 4 box and 25 harness dobby; one Crompton and Knowles 26-inch terry towel loom, 3 by 1 box and 16-harness dobby; one Crompton and Knowles 64-inch damask loom, 4 by 1 box and 624-hook Jacquard; one Whitin 40-inch multiple cam loom; one Whitin 40-inch loom, 20 harness dobby; one 27-inch Whitin medium duck loom; two Kilburn and Lincoln 36-inch plain looms; one Crompton and Knowles 30-inch loom, 2 by 2 box and 16 harness dobby; one Crompton and Knowles 30-inch loom, 416-hook Jacquard and card multiplier; one "E" model 28-inch Draper loom, steel harness warp stop motion; one "E" model 28-inch Draper loom, two harness "string" warp stop motion; one "E" model 28-inch Draper loom, multiple cams and extra selvage motion; one "K" model 28-inch Draper loom; double filling fork, feeler and leno motion; one 40-inch "Ideal" Stafford loom, feeler and 624-hook C. & K. Jacquard; one 30-inch "Ideal" Stafford bag loom; one 40-inch "Ideal"

Stafford loom, two harness; one "Ideal" Stafford 4-harness loom; one four space, four bank, Crompton and Knowles narrow fabric loom, 416-hook Jacquard; one Crompton and Knowles 40-inch loom with 624-hook Jacquard; one Crompton and Knowles 30-inch 4 by 1 box loom with 20-harness dobby and leno motion; one Crompton and Knowles 30-inch 2 by 1 automatic box loom; one "E" model 40-inch Draper loom; multiple harness; one Hopedale Mfg. Co's 40-inch "Nordray" plain loom; one Hopedale Mfg. Co. 40-inch Nordray 5-harness satin loom; 1 C. & K. automatic Dobby Dress Goods, 46½", 25 harness, 4 x 1 Box, motor drive; 1 C. & K. Dobby Silk, 60 in., 25 harness, 4 x 4 Box, motor drive; one Royle French index. piano, card cutting machine; four drawing in frames and a complementary supply of reeds, combs, harness and pick gears. One Crompton & Knowles 26" Terry Towel loom, 2x1 Box, equipped with 16 Harness double cylinder and rocking cylinder motion dobby, positive terry let-off mechanism, 2 bank warp stop motion and spring jacks for the dobby; one 424-hook Halton double cylinder jaquard.

TEXTILE CHEMISTRY AND DYEING

MR. DOGGETT

T. C. 31.—Organic Chemistry—Semester 1 (2 and 2) 2 2/3 cr.
Jr. XI. (Doggett).

Prerequisites: Chemistry 11, 12.

After a general introduction a detailed study of the aliphatic series follows; including constitutional and structural theory. Some attention will be given to the history of organic chemistry.

The laboratory work consists in the preparation of one or more organic compounds illustrating each group. Some time is also given to qualitative organic analysis. Special attention is given to the proper setting up and manipulation of apparatus.

T. C. 32.—Organic Chemistry—Semester 2 (2 and 2)
2 2/3 cr. Jr. XI. (Doggett).

Prerequisite: T. C. 31.

The aromatic series of organic compounds is studied, special prominence being given to the structure and preparation of synthetic dyestuffs and of the intermediate compounds from which they are made.

In the laboratory typical aromatic compounds illustrative of each group as well as a number of intermediates and dyestuffs are prepared.

**T. C. 41.—Organic Chemistry—Semester 1 (2 and 2)
2 2/3 cr. Sr. XI. (Doggett).**

Prerequisites: Chemistry 11, 12; T. C. 31, 32.

The manufacture, uses, and technical analysis of the more important chemicals and other compounds used in the textile industry are studied.

The laboratory work in connection therewith consists in the preparation and analysis of some of the chemicals and other products most commonly used.

**T. C. 42.—Dyeing—Semester 2 (0 and 4) 1 1/3 cr. Sr. XI.
(Doggett).**

Prerequisite: T. C. 41.

This course includes the bleaching, dyeing, mercerizing, and printing of cotton. Some attention is also given to the dyeing of wool and of silk. The more important mordants are prepared and applied, and experiments illustrating the properties and uses of gums, starches and chemicals used in the textile industry are made. Then follows color matching and the identification of dyes on the fiber. A brief discussion of the physical and chemical principles involved precedes the laboratory work of each period.

Division Rooms and Equipment.

The work in textile chemistry and dyeing is carried on in an experimental laboratory and dyehouse.

The experimental laboratory has accommodation and apparatus for thirty students. The desks are supplied with gas, water, drawers, and lockers. The dyehouse equipment comprises one Schaum and Uhlinger self-balancing hydro-extractor; one model vacuum dyeing machine with steam engine attached; one Birch sample dyeing machine; one calico printing machine; one Butterworth jigger; one Psarski dyeing machine; one Franklin dyeing machine; one Hussong dyeing machine; one mercerising machine for yarns; one steaming and ageing box; jacketed copper kettles.

VETERINARY SCIENCE

MR. FEELEY

**Ve. 30.—Anatomy and Physiology—Semester 2 (2 and 0)
2 2/3 cr. (Feeley).**

This course is a study of anatomy, physiology of digestion, farm sanitation, common diseases, and first aid treatment and is especially arranged for agricultural students.

The course in anatomy, which is arranged as an introduction to the study of physiology of digestion and stock judging, includes the study of skeletons and the principal articulations, muscles of locomotion and the organs of circulatory, respiratory, digestion, and urinary apparatus. Skeletons, models, and charts are used in this course. The physiology of digestion treats of the chemical and physical processes by which food is made soluble and capable of absorption. Farm sanitation deals with sanitary conditions and with the fundamentals in the control of contagious and infectious diseases. The common diseases and first aid treatment of farm animals are also studied.

Text-book: "Veterinary Science"—Hadley.

Vet. 41.—**Diseases of Animals**—Semester 1 (2 and 2)
2 2/3 cr. (Feeley)

This course covers the principles of etiology, pathology, diagnosis, and treatment of the various diseases of domestic animals.

YARN MANUFACTURING†

MR. EATON

MESSRS: CAMPBELL* AND LEE**

Y. M. 11.—**The Textile Industry**—Semester 1 (1 and 2)
1 2/3 cr. Fr. VIII, XI. (Eaton and Lee).

The aim of this course is to introduce the student to the textile industry through study and discussions on organization, employment, promotion, and the economic importance of the industry and its related fields. The class work may be supplemented by visits to mills. Some periods will be used for a study of certain skills. The student will make a study of the duties of machine tenders, section men and foremen in the picker room, card room and spinning room.

Y. M. 21.—**Pickers**—Semester 1 (2 and 2) 2 2/3 cr. So. XI.
(Eaton, Campbell, Lee).

Opening and mixing cotton; study of bale breakers, automatic feeders, intermediate and finisher lappers; various styles of openers, setting and adjusting same; cleaning trunks, different kinds of beater, screens, fans, calendar rolls, evener motion and measuring motion; calculation for drafts, production, speeds, etc; practice operating pickers and cleaning machinery.

Text-book: "Cotton Yarn Manufacture."—Winchester.

†Courses subject to change.

*On leave of absence.

**In place of Mr. Campbell during leave of absence.

Y. M. 22.—Cards and Drawing Frames—Semester 2 (2 and 2) 2 2/3 cr. So. XI. (Eaton, Campbell).

A study of the revolving flat card, principal parts, stripping, clothing, grinding, brushing, and settings; calculations for speeds, production, waste, draft, and constants for same; setting of metallic and leather covered rolls on the drawing frame; care and varnishing leather covered rolls, calculation for speeds and drafts. Practice operating cards, drawing frames, and other machinery.

Text-book: "Cotton Yarn Manufacture"—Winchester

Y. M. 31.—Roving Frames—Semester 1 (2 and 2) 2 2/3 cr. Jr. VIII, XI. (Eaton).

The construction and operation of roving frames, study of the slubber, intermediate, roving frame, and jack frame; the different styles of top rolls used and the method of weighting them; making necessary calculations for draft, twist, tension, lay, taper and constants for same; production per spindle and sizing the roving, turns per inch for different hanks.

Practice operating roving frames.

Text-book: "Cotton Yarn Manufacture."—Winchester.

Y. M. 32.—Cotton Grading, Doubling and Drafting—Semester 2 (2 and 2) 2/3 cr. Jr. VIII, XI.

Classing of cotton according to U. S. Government standards for grades, tinges, and stains; stapling of cotton, study of Sea Island, Egyptian, and all grades of cotton raised in the United States; methods of ginning, marketing, contracts for cotton, receiving and handling cotton at mills, and claims.

Calculation for draft, production, weights, and number of machines required for different counts, labor costs, and production of yarn from picker to spinning frame inclusive.

Text-book: Notes and Government Bulletins.

Y. M. 41.—Spinning, Spooling and Twisting—Semester 1 (2 and 2) 2 2/3 cr. Sr. XI and Jr. VIII. (Eaton).

Construction and principal parts of spinning spooling machines, such as builder motions, travelers, rolls and creels. Calculations on twisting, drafting, doubling, and constants; wet and dry twisting, amount of twist in different ply and coarse yarns, balanced twist, and thread; size of rings, steel and brass travelers for different counts; calculation for same.

Practice operating spinning and spooling machines.

Text-book: "Cotton Yarn Manufacture."—Winchester.

Y. M. 42.—Combers, Sliver Lap, and Ribbon Lap—Semester 2
(1 and 2) 1 2/3 cr. Sr. XI and Jr. VIII. (Campbell).

Construction, setting, and adjustment of sliver lap and ribbon lap machines; calculations for draft and production of the same; study of somber, timing, setting for different staples of cotton and production of waste; operation and management of combers and all necessary calculations.

Practice in operating the sliver lap, ribbon lap, and comber machines; also in running test lots of cotton through the different machines.

Text-book: "Cotton Yarn Manufacture"—Winchester.

Y. M. 44.—Mill Economics—Semester 2 (2 and 0) 2 cr.
(Eaton).

The character of this course is descriptive rather than theoretical. Its aim is to explain the principles of economics as applied to general management. This includes the labor of cost of production in the various departments, wages and labor conditions, care of mill and mill village. Students will report in class on articles assigned them in technical books and periodicals.

Y. M. 51, 50.—Project in Spinning—Semesters 1 and 2**
1 cr. (Eaton).

Prerequisites: Y. M. 21, 22, 31.

Warp and filling yarns to be produced from raw stock and complete tests to be made in testing laboratory. Time as arranged.

To be elected with approval of the director and instructor.

Division Rooms and Equipment.

Picker Rooms.—Pickers—One Atherton automatic feeder; one Atherton breaker lapper; one Atherton finisher lapper. Pickers are equipped with Brown-St. Onge patent adjustable grid bars.

Card Room.—Cards—One Mason 40 inch revolving top flat card 1, Woonsocket Machine Co., Revolving Top flat card.

Double Carding Process.—One Saco and Pettee 40 inch breaker card; one Saco and Pettee 20 inch improved lap winder; one Saco and Pettee 40 inch finisher card.

Combing.—One Whitin sliver lapper; one Whitin four head, ribbon lapper, one eight head,, Whitin high speed comber.

Railway Heads.—One Saco and Pettee railway head, with evener motion, stop motion and metallic rolls; one Mason railway head, with evener motion, stop motion and metallic rolls.

****NOTE**—Y. M. 50, 51, may be combined with T. of F. 50, 51 to make a Mill Project.

Drawing Frames.—Two Saco and Pettee drawing frames four deliveries, stop motions, metallic rolls; one Mason draw frame, four deliveries, stop motions and metallic rolls; one Whitin drawing frame four deliveries, leather covered rolls, one Woonsocket drawing frame, four deliveries, Metallic rolls.

Fly Frames.—One Saco and Pettee 12 x 6 inch, 40 spindle slubber, with latest differential motion; one Saco and Pettee 6 x 3 inch 80 spindle, fine roving frame, with latest differential motion, one new four roller Slubber 60 spindles Saco Lowell, one new four-roller intermediate 72 spindles Saco Lowell, one new Woonsocket fine frame 80 spindles, one Woonsocket 6 x 2½ inch, 96 spindle jack roving frame, with Daly's improved differential motion.

Ring Spinning.—One Saco and Pettee combination warp and filling ring spinning frame, 128 spindles; one Mason combination warp and filling ring spinning frame, 112 spindles; two Fales and Jenks combination warp and filling ring spinning frames, 80 spindles each designed for spinning fine counts. two Whitin combination warp and filling ring spinning frames, 80 spindles each. One new Fales and Jenks tape drive Westinghouse motor driven 80 spindle spinning frame for both warps filling. 1 H. & B 80 spindle, motor driven spinning frame with self weighting back and middle rolls traveling clearer.

Spooling.—Two Draper spoolers 40 spindles each; one Saco and Pettee spooler, 72 spindles; one Barber-Coleman automatic knitter, one Byrd automatic knitter; One motor driven Westinghouse 24 spindle Eastern and Burnham spooler; one Barber-Coleman knitter "Simplex."

Twisting.—One Draper combination wet and dry twister, 48 spindles; two Fales and Jenks wet twisters, combination filling and taper top wind; 70 spindles each.

Winding.—One universal winder and doubler; one Foster Cone and tube winder.

Reeling.—One Draper 54 inch reel, 50 spindles.

MISCELLANEOUS EQUIPMENT—One set Washburn wooden spinning rollers; one set self weighting iron rollers; Fairbanks Scales; Model of Daly's differential motion; models of Campbell ball bearing rolls; sample from all processes in making spinning rings; model of Eagle gin; Charlotte Supply Co's skein tester; Reeves variable speed transmission; Bahnson and American Moistening Co. Humidifiers.

TESTING LABORATORY—One Alfred Suter direct yarn counter; one Alfred Suter twist couter; Brown and Sharpe roving reel, yarn reel scales and weights; Henry L. Scott Yarn and Cloth tester, motor driven; Moscrop single strand tester; Emerson conditioning oven; Torsion Balance yarn calculating scales and necessary accessories. Mullens Tester.

ZOOLOGY AND ENTOMOLOGY

MR. SHERMAN

MESSRS: DUNAVAN AND HENDERSON

Z. & E. 11.—General Zoology—Semester 1 (3 and 2) 3 2/3 cr.
Fr. III, X. (Dunavan, Henderson).

The fundamentals of structure and life processes of animals with a survey of the animal kingdom. For academic and pre-medical students.

Text-book: "Outlines of General Zoology"—Newman.

Laboratory Manual: "Laboratory Manual of Zoology"—Hyman.

Z. & E. 22.—General Zoology—Semester 2 (2 and 2)
2 2/3 cr. So. IX. (Dunavan, Henderson).

The fundamentals of structure and life processes of animals and a survey of the animal kingdom with reference to economic groups, to lay a foundation for the special courses pertaining to agriculture which follow.

Text-book: "Outlines of General Zoology"—Newman.

Laboratory Manual "Laboratory Manual of Zoology"—Hyman.

Z. & E. 31.—General and Applied Entomology—Semester 1
(2 and 2) 2 2/3 cr. (Dunavan, Henderson).

Prerequisite: Zoology 22.

Structure, development, habits, and groups of insects with reference to economic forms and their control.

Text-book: "Applied Entomology"—Fernald.

Z. & E. 32.—Advanced General Entomology—Semester 2
(2 and 2) 2 2/3 cr. (Dunavan).

Prerequisite: Entomology 31.

A comprehensive study of the orders and families of insects, and morphology from taxonomic view point; life-history, adaptations, ecological relationships; also practice in collecting, preserving, mounting and labelling specimens for permanent collections.

Text-book: "Introduction to Entomology"—Comstock.

Z. & E. 41, 42.—Economic Entomology—Semesters 1 and 2
(2 and 2) 2 2/3 cr. (Dunavan, Henderson).

Prerequisite: Entomology 31.

First semester covers study of insects of field crops, livestock, stored products, and of the household, with control measures; observations in the field.

Second semester covers study of insects of the orchard, garden, and greenhouse and general truck crops; observations in the field. Practice is given in making and applying insecticides.

Text-book: "Injurious Insects"—Herrick.

Z. & E. 43.—Insects of Forest and Shade Trees and Ornamentals.—Semester 1. (2 and 3) 3 cr. (Sherman).

Prerequisite: Entomology 31.

A study of the more important insects attacking forest, shade and ornamental trees and shrubs, including life-histories and control measures. The laboratory periods are devoted largely to observing and collecting in the field and forest.

Text-book: "Manual of Free and Shrub Insects"—Felt.

Z. & E. 45.—Insect Morphology—Semester 1 (2 and 2) 2 2/3 cr. (Dunavan).

Prerequisite: Entomology 31.

A study of external and internal anatomy of insects; includes a limited amount of general and histological technique.

Laboratory Manual: "The Anatomy of Insects"—Comstock and Kellogg.

Reference: "Introduction to Entomology"—Comstock.

Z. & E. 44.—Beekeeping—Semester 2 (2 and 2) 2 2/3 cr.

An introduction to the scientific and economic phase of beekeeping. The college apiary affords opportunity for information and experience in production of both comb and extracted honey.

Text-book: "A. B. C. and X. Y. Z. of Beekeeping"—A. I. Root.

Z. & E. 47.—Animal Parasitology—Semester 1 (2 and 2) 2 2/3 cr. (Henderson).

Prerequisite: Entomology 31.

A review of animal parasites in the transmission of disease and relation to health of man and animals, including laboratory and field practice in biology and sanitation.

Text-book: "Animal Parasites and Human Diseases"—Chandler.

Z. & E. 46.—Systematic Entomology—Semester 2 (1 and 4) 2 1/3 cr. (Sherman).

Prerequisite: Entomology 31.

Identification of insects in certain groups to genera and species,—sketches of certain economic species; structural adaptations to modes of life; review of certain important families; practice in collecting and preserving specimens.

References: Volumes and Papers from College and Division Libraries.

Z. & E.—51, 50.—Thesis and Problems—Semesters 1 and 2 (1 and 0) 1 cr. (Sherman, Dunavan, Henderson).

Prerequisite: Entomology 31.

A study of modern entomological and zoological problems and methods, on the seminar or round-table basis; all members of staff and advanced students participating.

In exceptional cases credit may be granted on work in preparing a thesis as part of the graduation requirements, and as part of the requirements for civil service examination. The amount of credit will depend upon the nature of the problem, and amount and quality of work done.

Z. & E. 48.—Ornithology—Semester 2 (0 and 3) 1 cr.
(Sherman).

Prerequisite: Zoology 11 or 22.

Field and laboratory study of birds, keeping lists of those identified; consideration of the species, their habits, and relations to human welfare.

References: "Birds of Eastern North America"—Chapman;
"Birds of South Carolina"—Wayne.

Division Quarters and Equipment

General Laboratory and Lecture Room—This large and well-lighted room is on the first floor of the library building and has standard laboratory tables and lockers; with microscopes, lantern, microtome, and other equipment.

Divisional Offices—Located on first floor library building near the laboratory and lecture room. Here are kept the files, records and library of the division.

Insecticide Laboratory—A large room on first floor of library building used for instruction and practice in preparation of standard insecticides, and for research in insecticide problems. Used by both College and Experiment Station.

Research Laboratory—A large room on first floor of library building; with equipment for research, photography, etc; used more especially for work of Experiment Station.

Beekeeping Laboratory—A small frame building about one-fifth mile northwest of library, which is used for work in beekeeping, with equipment for instruction and practice, and with an apiary in the yard.

Aquarium and Vivarium—Arrangements are under way for equipping a commodious brick building of two large rooms, with running water, tanks, pool, and other facilities for living animals, both aquatic and terrestrial. It is intended that work-tables, shelves, etc will provide for rougher laboratory work and storage of large specimens.

SUUMER SCHOOL

The summer school is a regular part of the service offered the state. The summer session for 1927 will begin June 13th and close July 23rd. During this period instruction will be given as follows:

1. Regular college work.
2. Special training for teachers of Agriculture in conducting evening schools.
3. Textile Industrial Education.
4. Specialized instruction in conducting textile testing.
5. A short course combining these two features—Industrial Education and Textiles—for persons who teach evening schools in Textiles.
6. Training for foremen in industry.
7. Cotton grading June 13 to July 9, 1927.
8. A conference is planned for executives, superintendents and foremen of the textile industry. The tentative dates set for this conference are June 23 and 24, 1927. It is planned to have outstanding leaders take part in this program.
9. Education for principals of rural schools, principals of mill schools and public school teachers.
10. Methods courses for primary and elementary teachers.

Provisions have been made for rooms and meals for both men and women who are interested in coming to Clemson for the training offered during the summer school.

A copy of the summer school catalog may be had on request addressed to The Registrar, Clemson College, S. C.

REGISTER**The Corps of Cadets.
1926-1927****UNITED STATES ARMY PERSONNEL**

Lieutenant Colonel Otis R. Cole	Infantry
Captain Ernest A. Higgins	Infantry
Captain Arthur W. Penrose	Infantry
First Lieutenant Richard W. Johnson	Infantry
First Lieutenant Paul G. Balcar	Infantry
Staff Sergeant Archie D. Stern	Detached Enlisted Men's List
Sergeant Gilbert E. Naramor	Detached Enlisted Men's List

CADET REGIMENTAL ORGANIZATION

Colonel J. H. Baker
Lieutenant Colonel R. M. Marshall
Captain L. A. Seaborn, Adjutant
Captain J. R. Cooper, Chaplain
Captain D. H. Ross, Intelligence Officer
Captain C. C. Newman, Supply Officer
Master Sergeant A. P. Wylie, (Regimental Sergeant Major)
Master Sergeant M. A. Jones, (Regimental Supply Sergeant)
Staff Sergeant W. N. Martin (Color Sergeant)
Staff Sergeant R. O. Pickens (Color Sergeant)

BAND

Captain	W. C. Brown
First Lieutenant	G. S. Hutchins
Second Lieutenant	L. E. Cromer
Drum Major	M. B. Farrar
Sergeant	J. H. Clarke
Sergeant	W. P. Timmerman
Corporal	B. V. Cornwall
Corporal	L. H. Graham
Corporal	J. W. Gray
Corporal	J. M. Jenkins

DRUM AND BUGLE CORPS

First Lieutenant	W. West
Sergeant	J. J. Avent
Sergeant	R. R. Davis
Corporal	D. L. Wingo

FIRST BATTALION

Major H. K. Brabham
 First Lieutenant, Adjutant F. J. Fishburnee
 Staff Sergeant, Sergeant Major T. W. Smith

Co. A**Co. B****Co. C****Co. D****CAPTAINS**

Youngblood, J. E. Brodie, G. H. Garrison, R. H. Haskell, A. C.

FIRST LIEUTENANTS

Donaldson, J. H. DuPre, G. C. Hendrix, T. J. Gillespie, S. L.
 Warren, J. A. Lee, S. A. Rosamond, J. E. Rickborn, J. H.

SECOND LIEUTENANTS

Causey, O. R. Major, J. D. Massey, L. B. Aull, J. L.
 Long, E. M. Cannon, J. P. Dobson, C. R. Googe, W. J.

FIRST SERGEANTS

Burgess, R. H. Hanner, T. G. Glaze, C. H. Taylor, H. K.

SERGEANTS

Garrison, J. C. Buford, J. A. Bryan, C. A. Barton, L. S.
 Green, C. D. Early, E. B. Maner, W. F. Bell, J. L.
 Jones, J. A. Seaborn, W. N. Hewelett, L. M. Hair, J. C.
 Marchbanks, J. C. Shelley, L. W. Smith, Robt. L. Odell, W. R.
 Mundy, J. T. White, L. M. Pressley, W. H.

CORPORALS

Carter, Richard C. Cochran, J. H. Cobb, G. P. Clyburn, W. P.
 Copeland, T. H. Davis, J. N. Crosland, R. E. Hammett, R. D.
 Duffie, H. F. Eison, F. J. Marshall, L. E. Maddox, W. B.
 Harvin, S. A. Galloway, J. C. Rodgers, S. H. Poore, M. L.
 Hoke, F. M. Jones, H. W. Sander, L. F. Ray, C. E.
 King, C. J. Stevenson, M. B. Sharp, H. D. Richardson, M. B.
 Mitchell, T. J. Stroman, C. W. Valley, J. B. Sexton, E. W.
 Pridmore, R. G. Sumner, J. F. Wray, W. J. Turner, H.
 West, W. P. Taylor, R. A.

SECOND BATTALION

Major J. K. Avent
 First Lieutenant, Adjutant J. Kershaw
 Staff Sergeant, Sergeant Major T. L. Houghston

Co. E**Co. F****Co. G****Co. H****CAPTAINS**

King, J. N.

Mitchell, R. H.

McTeer, J. R.

Little, T. R.

FIRST LIEUTENANTS

Jones, R. C.

Cureton, R. H.

Corbett, T. B.

Hicks, M. H.

McLeod, C. E.

Stoutamire, H. L.

Earle, J. E.

McCracken, H. E.

SECOND LIEUTENANTS

Brock, J. L.

Greene, M. H.

Dill, R. C.

Kitchen, T. W.

Sams, R. O.

Hendee, M. H.

White, A. H.

Smith, C. T.

FIRST SERGEANTS

Klugh, G. F.

Link, A. C.

Dargan, W. C.

Stoppelbein, H. E.

SERGEANTS

Beason, J. T.

Crook, M. D.

Abbott, W. B.

Bryce, G. T.

Heard, L. M.

Dunlop, G. H.

Bickley, B. L.

Cunningham, J. W.

Welborn, M. B.

Husbands, H.

Eskew, H. L.

Drake, H. B.

Wingard, B. F.

Stutts, R. T.

Hightower, R. E.

Richey, B. R.

Murrah, E. S.

Turner, W. B.

CORPORALS

Cooper, W. A.

Barry, W. F.

Cain, D. M.

Adams, Jas. L.

Cunningham, H. W.

Dill, T. E.

Davis, G. M.

Blankenship, J. M.

Ellis, J. T.

Faulkenberry, G. E. Dickinson, G. M.

Callahan, J. F.

Higgins, E. E.

Harter, J. W.

Hawkins, J. F.

Hendrix, J. I.

Hoefer, H. W.

Tiencken, W. P.

Killingsworth, H. M. Kline, W. N.

McCauley, H. R.

Townsend, T. P.

Murdock, E. C.

McMillan, R. F.

Motes, J. H.

Wright, C. D.

Shands, H. L.

Moore, F. H.

Smoak, K. A.

Whitten, S. E.

McComb, J. R.

THIRD BATTALION

Major C. P. West
 First Lieutenant, Adjutant J. A. Milling
 Staff Sergeants, Sergeant Major D. S. Cuttino

Co. I

Co. K

Co. L

Co. M

CAPTAINS

Russell, H. E. Whilden, C. N. James, J. H. Berry, W. J.

SECOND LIEUTENANTS

Adams, J. W. Anderson, R. D. Austin, P. B. McDaniel, S. W.
 Smith, T. E. Reynolds, C. M. Bryce, G. W. Parler, M. L.

SECOND LIEUTENANT

Chreitzberg, C. H. Alexander, S. B. Caughman, E. M. Baldwin, H. F.
 Herron, J. L. Etheredge, T. J. Whetsell, J. A. Wilson, J. U.

FIRST SERGEANTS

Hudgens, W. W. Fowler, B. R. Whilden, J. E. Britt, C. E.

SERGEANTS

Higgins, R. C. Brogden, W. J. Carroll, G. H. Coker, W. T.
 Harrington, R. C. Berry, L. E. James, W. C. Hart, L. W.
 Mercer, C. W. Hane, A. W. Pruitt, W. R. Hicks, J. O.
 Midkiff, R. B. Hane, H. T. White, R. B. McPhail, S.
 Moore, J. N. McMeekin, R. P. Williams, H. T. Wright, J. S.

CORPORALS

Barton, C. R. Clary, F. E. Andrews, G. T. Anderson, T. C.
 Caughman, John M. Courtney, J. H. Lachicotte, F. W. Anderson, C. E.
 Clyburn, T. M. Chitty, M. G. McGee, H. A. Jackson, C. A.
 Gaines, F. P. Fike, C. W. McLeod, J. B. Jeffers, R.
 McLeskey, J. J. O'Quinn, J. D. Mayer, J. H. Poe, H. D.
 Martin, C. R. Pearman, F. E. Miller, H. S. Robbins, L. L.
 Patterson, H. T. Price, J. M. Odell, J. B. Suber, J. C.
 Scott, W. H. Rose, W. T. Yarbrough, R. W. Webb, E. H.

DEGREES CONFERRED JUNE 1, 1926

Bachelor of Science

AGRICULTURE

Elmore Rosebur Alexander	Fort Mill	Junius Mayes Lemmon	Lynchburg
Thomas LaFayette Walter Bailey, Jr.	Clinton	Lawton Sidney Long, Jr.	Prosperity
		Lawrence Clayton McAlister, Jr	Pendleton
Hugh Alexander Brown	Westminster	Guy William McClellan	Anderson
Ralph Henry Cain	Sharon	Leslie Gladstone McCraw	Gaffney
Henry Crim Coleman	Hopkins	James King Maner	Garnett
Francis Newton Culler	Swansea	Francis Brummette Mobley	Heath Springs
William Joseph Douglass	Jonesville	Andrew Burbidge Padgett	Bamberg
James Claude Epting	Little Mountain	John Randolph Paulling, Jr. ...	St. Matthews
Paul Bryson Ezell	Cross Anchor	Colonel Hoyt Rogers	Mullins
William Anderson Farmer	Anderson	Wayland Arthur Shands	Ebenezer
John Melmoth Fleming	Lanford	Franklin Sherman, Jr.	Clemson College
Rembert Melton Foster	White Stone	Leroy Hampton Simkins	Augusta, Ga.
Charley Reid Garrison	Seneca	James Adger Smyth, Jr.	Hendersonville,
John Keitt Hane, Jr.	Fort Motte		N. C.
Whitefield Watson Hane	St. Matthews	Richard Dudley Steer	Clinton
William Thornwell Henerey	Sedalia	Paul Strickland	Belton
Harry Sylvester Hinson	Lynchburg	Henry Lowry Thomas	Mayesville
Ralph Alexander Jackson	Starr	Harold Klugh Tinsley	Hodges
Edward Harold Jordan	Timmons ville	Perry Hamilton Tison	Allendale
Robert Calhoun Jordan	Richburg	Roy Larkin Trent	Clifton
Hugh Franklin Kizer	St. George	Samuel Fogle Wells	Sumter
Jack McDonald Law	Darlington	William Albert White	Chester

ARCHITECTURE

William Ennis Chapman, Jr.	Pendleton	Robert Eugene Smith	Blacksburg
John Enoch Cudd	Jonesville	Leland Richard Tozier	Sumter

CHEMISTRY

Teofilo Leon Bradley	Columbia	Jackson Boling Hester	Easley
David Ramsey Ergle	Augusta, Ga.	Frederick Byron Leitzsey	Columbia
Charles Elry Hawkins	Starr	Wallace Robert Roy	Columbia

CIVIL ENGINEERING

Clyde Mitchell Barr	Leesville	Elias Thomas McGee	Starr
Luke Smith Bouknight, Jr.	Batesburg	Jennings Bryan McKerley	Elko
William Wright Bryan	Clemson College	Barnard Milton Smith	Starr
James Bankston Caughman	Columbia	John Emmett Walker	Blackville

ELECTRICAL ENGINEERING

Horace Julian Bowles	Greenwood	Francis Grier Kearse	Crocketville
Hubert Lee Byrd	North	Belton David King	Swansea
Herbert Alvin Cox	St. Matthews	Benjamin Vincent Martin	Clemson College
Samuel McGauvey Cox	Seneca	Ernest Day Palmer	Central
James Archie Davis	Sumter	Austin Oliver Roche, Jr.	Abbeville
Charlie Brown Day	Trenton	Van Cortez Sanders	Newberry
Harris Earle Gaffney	Gaffney	Junius Reid Smith	Greenville
Norman Asa Garrison	Sandy Springs	Walter Sidney Stewman	Lancaster
George Hembry Greene	Greer	William Harry Sudlow	Aiken
Ottis Miles Harrelson	Loris	Albert Jerome Thackston, Jr.	Orangeburg
Walter Furman Heller	Sandy Springs	Joseph Elmer Westbury	Georgetown
William Luther Jones	Greer	James Quilla Wray, Jr.	York
John Brooks Wright	Shelton		

ENGINEERING INDUSTRIAL EDUCATION

Judson Townes Mayfield	Denmark	George Edward Turner, Jr.	Anderson
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GENERAL SCIENCE

Charles Nathaniel Cobb	Easley
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MECHANICAL ENGINEERING

Olin Samuel Anderson	Timmons ville	Clarence Allen McGill	Anderson
Thomas Raymond Boseman	Darlington	James Robert Sanders	Chester
James Withrow Carson	Spartanburg	Ernest Tyler Smith	Anderson
Jems Key Evans	Beaufort	Joseph Augustus Todd	Starr
Frank Burriss Hall	Iva	John Rice Watson	Batesburg
Otto Frank Zagora	Charlotte, N. C.		

TEXTILE ENGINEERING

John Preston Batson	Greenville	George Warren Gignilliat	Seneca
James Arthur Boyd	Laurens	Charles Adolphus New	Greenville
Ernest Willoughby Carpenter, Jr.	Greenville	Joe Hardin Sanders	Chester
David Earle Carter	Clinton	Walter Herman Taylor	Laurens

TEXTILE INDUSTRIAL EDUCATION

James McDow Darby	Sandy Springs	Thomas Gilbert Jackson	Florence
William Robert Elliott, Jr.	Winnsboro	Ko Chia Li	Mukden, China
Joel Alexander Fewell	Rock Hill	Eugene Little McCormac	Dillon
Frederick Swain Gilmer	Anderson	Lester Allen Porter	Springfield
Samuel Herbert Hendrix	Lexington	Joe Major Pruitt	Starr
Robert Harvey Hope	Rock Hill	Lloyd Gignilliat Trimmier	Spartanburg

Other Degrees Awarded June 1, 1926**BACHELOR OF SCIENCE****AGRICULTURE**

D. F. Parkins	
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ENGINEERING

J. A. Simpson	
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STUDENT REGISTER

The names are arranged in alphabetical order and following the names are symbols indicating classes and courses: Numerals preceding course symbols refer to classes—1 Freshman 2 Sophomore, 3 Junior, 4 Senior, A—Agriculture (Numeral following A indicates major course for Seniors: 1 Agronomy, 2 Animal Husbandry, 3 Agricultural Chemistry, 4 Dairy Husbandry, 5 Agricultural Education, 6 Entomology, 7 Horticulture, A & S—Arts and Science, Ar.—Architecture, C—Chemistry, E—Engineering, all engineering Freshmen; Electrical and Mechanical Sophomore and Junior classes; C. E.—Civil Engineering, E. E.—Electrical Engineering, M. E.—Mechanical Engineering, T—Textile, T. E.—Textile Industrial Education, G. S.—General Science; S.—Special.

Name and Course	County	Residence
Abbott, W. B. (3 CE)	Oconee	Walhalla
Acker, T. F. (3 A & S)	Anderson	Anderson
Acker, W. H. (2 E)		Mount Vernon, N. Y.
Adams, G. G. (1 E)	Lexington	Batesburg
Adams, H. (2 Ar.)	Oconee	Seneca
Adams, James L. (2 T)	York	Rock Hill
Adams, Joe L. (2 CE)	McCormick	Meriwether
Adams, J. W. 4 CE)		Jemison, Ala.
Adams, L. C. (4 CE)	McCormick	Meriwether
Adams, O. A. (1 E)	Pickens	Pickens
Albergotti, J. C. (3CE)	Oconee	Clemson College
Albright, C. H. (2 Ar.)	Laurens	Laurens
Alexander, R. C. (2 A)	Pickens	Calhoun
Alexander, S. R. (A)	Anderson	Anderson
Allison, J. H. (1 E)	Greenville	Greenville
Allison, L. D. (3 Ar.)	Greenville	Greenville
Allsbrooks, C. C. (1 A)	Sumter	Wedgfield
Anderson, C. E. (2 E)	Florence	Timmons ville
Anderson, C. W. (2 CE)		Greensboro, N. C.
Anderson, G. M. (1 E)	Allendale	Fairfax
Anderson, J. B. (3 E)	Chester	Richburg
Anderson, L. (2 E)		Auburndale, Fla.
Anderson, M. H. (3 A)	Florence	Timmons ville
Anderson, R. D. (4 A 5)	Marlboro	Bennettsville
Anderson, R. N. (3 E)	Richland	Columbia
Anderson, T. C. (2 E)	Greenwood	Ninety Six
Andrews, C. C. (3 CE)	Greenville	Fountain Inn
Andrews, G. T. (2 CE)	Laurens	Fountaain Inn
Andrews, M. P. (1 E)		Flat Rock, N. C.
Arial, J. H. (1 E)	Pickens	Easley
Armstrong, E. (1 E)	Greenville	Fountain Inn
Asbill, H. W. (1 E)	Richland	Columbia
Asbill, L. M. (2 A)	Saluda	Ridge Springs
Askins, H. W. (4 ME)	Florence	Timmons ville
Askins, J. H. (1 E)	Florence	Timmons ville
Atkinson, J. M. (3 Ar.)	Florence	Florence
Atkinson, J. R. (1 E)	Sumter	Hagood
Attaway, J. C. (1 E)	Allendale	Appleton

Aull, J. L. (4 CE)	Newberry	Pomaria
Austin, P. B. (4 CE)	Greenville	Greenville
Austin, W. R. (1 E)	Greenville	Simpsonville
Avent, J. J. (3 CE)	Marlboro	Bennettsville
Avent, J. K. (4 CE)	Marlboro	Bennettsville
Ayers, R. G. (2 A)	Horry	Tabor, N. C.
Ayers, T. L. (S)	Horry	Tabor, N. C.
Bagnal, H. F. (2 T)	Clarendon	Manning
Bailey, M. C. (1 E)	Pickens	Pickens
Bailey, T. L. W. (S)	Laurens	Clinton
Baker, J. H. (4 A 3)	Orangeburg	Orangeburg
Baker, T. (1 E)	Lancaster	Lancaster
Baker, W. L. (4 A 6)	Chesterfield	Jefferson
Baldwin, H. L. (4 EE)	Orangeburg	Orangeburg
Bannister, F. M. (1 E)	Greenwood	Greenwood
Bankhead, W. W. (3 A & S)	Chester	Lowryville
Barber, H. S. (2 T)	Spartanburg	Clifton
Barfield, W. J. (1 E)	Bamberg	Denmark
Barnes, V. M. (1 A & S)	Anderson	Anderson
Barnes, W. C. (1 A)	Hampton	Brunson
Barringer, B. D. (1 T)		Charlotte, N. C.
Barron, W. H. (3 E)	York	York
Barry, W. F. (2 A&S)	Spartanburg	Moore
Barton, C. R. (2 T)	Anderson	Anderson
Barton, L. S. (3 Ar.)	Orangeburg	Orangeburg
Bates, J. N. (1 A)	Greenville	Travelers Rest
Batson, D. L. (2 A&S)	Greenville	Greenville
Beach, A. K. (2 CE)	Colleton	Walterboro
Beam, F. A. (4 A 1)	Anderson	Pelzer
Bearden, C. E. (3 A)	Oconee	Seneca
Beason, G. E. (1 A)	Greenville	Simpsonville
Beason, R. T. (1 A)	Spartanburg	Woodruff
Beason, J. T. (3 A)	Greenville	Simpsonville
Bell, C. M. (3 E)	Chester	Chester
Bell, J. D. (1 E)	Richland	Columbia
Bell, J. L. (3 T)	Anderson	Anderson
Bell, T. J. (1 A)	Darlington	Lamar
Bennett, C. C. (4 A 7)	Pickens	Calhoun
Bennett, H. P. (1 E)	Spartanburg	Enoree
Bennett, W. M. (4 GS)	Colleton	Ashton
Bennett, W. T. (2 E)	Bamberg	Olar
Benton, L. C. (2 A)	Florence	Timmons ville
Berry, H. B. (2 Ar.)	Orangeburg	Branchville
Berry, L. E. (2 A&S)	Spartanburg	Moore
Berry, W. J. (4 CE)	Spartanburg	Wellford
Bethea, O. W. (1 E)		Orlando, Fla.
Bethea, T. J. (S)	Marlboro	McColl
Bethea, W. M. (2 A)	Marlboro	McColl
Bevill, J. B. (1 E)	Anderson	Anderson
Bickley, B. L. (3 CE)	Bamberg	Ehrhardt
Bishop, R. L. (1 C)	Spartanburg	Inman
Bishop, W. A. (3 CE)	Spartanburg	Woodruff
Black, C. S. (1 E)	Anderson	Honea Path
Black, G. A. (1 E)	Laurens	Clinton
Black, J. P. (1 E)	Greenville	Greenville
Blackburn, W. C. (1 A)		Monroe, N. C.

Blackman, J. M. (2 T)	Anderson	Pendleton
Blackmon, W. H. (1 A)	Kershaw	Bethune
Blackwell, J. D. (3 T)	Sumter	Mayesville
Blackwell, T. J. (3 A)	Williamsburg	Salters Depot
Blakeney, C. R. (3 T)	Lancaster	Lancaster
Blakeney, W. C. (1 Ar.)	Lancaster	Lancaster
Blanding, J. D. (1 E)	Sumter	Sumter
Blankenship, J. M. (2 E)	York	Rock Hill
Blanks, C. M. (1 E)	Lancaster	Lancaster
Bleckley, B. B. (2 A & S)	Anderson	Anderson
Blitch, E. W. (2 E)	Charleston	North Charleston
Bodie, L. A. (1 E)	Saluda	Batesburg
Boggs, N. L. R. (2 A)	Pickens	Calhoun
Boleman, R. (2 E)	Anderson	Townville
Boney, (F. B. (1 A)	Richland	Blythewood
Bonnette, G. W. (4 A 5)	Saluda	Monetta
Boseman, J. C. (3 E)	Darlington	Darlington
Bostick, D. R. (1 E)	Beaufort	Beaufort
Bouknight, F. C. (1 A)	Richland	Irmo
Bouknight, V. A. (1 A & S)	Newberry	Newberry
Boykin, G. L. (2 T)	Sumter	Mayesville
Boykin, J. S. (1 A)	Lee	Rembert
Brabham, H. K. (4 A 1)	Bamberg	Bamberg
Brannon, R. R. (2 C)		Ashbon, Georgia
Brant, J. B. (1 E)	Allendale	Ulmer
Breazeale, J. M. (1 A)	Anderson	Belton
Breland, A. D. (4 A 2)	Colleton	Cottageville
Britt, C. E. (3 C E)	McCormick	McCormick
Brock, J. L. (4 E E)	Pickens	Central
Brodie, G. H. (4 E E)	Aiken	Salley
Brogdon, W. J. (3 E)	Sumter	Sumter
Brown, J. S. (1 E)	Kershaw	Camden
Brown, J. W. (1 E)	Union	Jonesville
Brown, W. C. (4 A & S)	Anderson	Belton
Bryan, C. A. (3 A)	Allendale	Allendale
Bryan, C. B. (1 A)	Lexington	Leesville
Pryce, E. C. (1 PM)	Florence	Florence
Bryce, G. T. (3 Ar.)	Florence	Florence
Bryce, G. W. (4 Ar.)	Florence	Florence
Buffkin, M. R. (2 A)	Horry	Green Sea
Buford, J. A. (3 TE)	Laurens	Clinton
Buie, G. S. (4 CE)	Chesterfield	Patrick
Burdett, C. M. (2 A)	Greenville	Simpsonville
Burdett, J. W. (1 A)	Greenville	Simpsonville
Burgess, R. H. (3 A)	Anderson	Belton
Burley, W. J. (3 A&S)	Fairfield	Monticello
Burnett, W. E. (4 ME)	Spartanburg	Wellford
Burns, D. M. (1 E)	Charleston	Charleston
Burns, Q. W. (1 E)	York	York
Burress, W. R. (1 E)	Anderson	Anderson
Burriss, J. L. (2 T)	Anderson	Anderson
Burriss, L. J. (3 E)	Anderson	Anderson
Butler, J. J. (1 E)	Greenville	Greenville
Byars, S. M. (S)	Anderson	Anderson
Byrd, E. C. (1 E)	Orangeburg	Branchville

Byrd, H. P. (1 E)	Darlington	Darlington
Byrd, H. S. (2 A)	Darlington	Hartsville
Byrd, J. L. (1 A)	Darlington	Society Hill
Cain, D. M. (2 A)	Sumter	Sumter
Cain, S. D. (2 A)	Sumter	Sumter
Calhoun, W. B. (4 A&S)	Allendale	Baldock
Callahan, J. F. (2 E)	Greenville	Greenville
Camp, W. J. (2 A)	Cherokee	Gaffney
Campbell, D. F. (2 T)		Anniston, Ala.
Campbell, L. (1 A)	Colleton	Smoaks
Campbell, T. A. (3 TE)	Anderson	Anderson
Campbell, W. M. (1 PM)	York	Tirzah
Campbell, M. M. (3 T)	Greenville	Greenville
Cannon, J. P. (4 ME)	Anderson	Honea Path
Carithers, A. G. (2 A)		Fort Valley, Ga.
Carroll, G. H. (3 A)	York	York
Carroll, J. (1 E)	York	Rock Hill
Carpenter, J. S. (1 E)	Spartanburg	Landrum
Carson, A. F. (1 A)	Pickens	Central
Carter, D. C. (1 E)	Laurens	Clinton
Carter, H. M. (3 PM)	Colleton	Smoaks
Carter, J. (1 A)	Colleton	Lodge
Carter, Ralph C. (1 A)	Oconee	Walhalla
Carter, Richard C. (2 E)	Orangeburg	Cope
Carter, T. H. (4 TE)	Florence	Timmons ville
Carter, W. H. (3 A)	Bamberg	Lodge
Carver, J. (3 E)	Spartanburg	Fairforest
Cash, D. H. (4 A 4)	Spartanburg	Chesnee
Caughman, E. M. (4 A 2)	Lexington	Lexington
Caughman, James M. (2 Ar)	Richland	Columbia
Caughman, John M. (2 T)	Lexington	Lexington
Causey, H. C. (2 E)	Horry	Tabor, N. C.
Causey, O. R. (4 A 6)	Horry	Tabor, N. C.
Chamblee, L. C. (1 E)	Anderson	Anderson
Chapman, B. S. (1 E)	Anderson	Pendleton
Chapman, H. (4 A&S)	Pickens	Calhoun
Chapman, H. A. (2 A)	Anderson	Belton
Chapman, H. T. (3 E)	Spartanburg	Inman
Chapman, W. F. (4 A 1)	Anderson	Belton
Charles, E. T. (1 E)	Florence	Timmons ville
Cheek, V. (2 Ar)	Cherokee	Blacksburg
Chewning, B. C. (1 E)	Kershaw	Camden
Childress, G. M. (1 E)	Greenville	Taylors
Chisholm, J. R. (1 A&S)	Hampton	Garnett
Chitty, M. G. (2 CE)	Orangeburg	Norway
Chrietzberg, B. K. (1 PM)	Anderson	Williamston
Chrietzberg, C. H. (4 TE)	Anderson	Williamston
Chumley, C. A. (1 E)	Laurens	Laurens
Clark, J. H. (3 E)	Abbeville	Calhoun Falls
Clark, W. C. (3 A)	Anderson	Pendleton
Clary, F. E. (2 CE)	Cherokee	Gaffney
Clayton, J. M. H. (1 A)	Pickens	Liberty
Clement, W. P. (1 E)	Spartanburg	Spartanburg
Clippard, J. H. (1 E)	Spartanburg	Enoree
Clyburn, E. S. (1 E)	Lancaster	Lancaster

Clyburn, T. M. (2 A)	Lancaster	Lancaster
Clyburn, W. P. (2 C)	Lancaster	Lancaster
Coan, J. A. (4 M E)	Spartanburg	Wellford
Cobb, G. P. (2 E)	Pickens	Easley
Cobb, L. L. (1 T)	Anderson	Anderson
Cochran, F. R. (1 E)	Anderson	Anderson
Cochran, J. H. (2 A)	Greenwood	Donalds
Cochran, J. W. (1 A)	Clarendon	Manning
Cohen, J. J. (1 Ar)		Augusta, Ga.
Coker, W. T. (2 T)	Florence	Timmons ville
Coleman, J. M. (1 E)	Horry	Gallivants Ferry
Coleman, M. J. (1 P M)	Florence	Hyman
Coleman, W. L. (2 C E)	Greenville	Greenville
Comer, R. F. (1 E)	Union	Kelton
Cook, C. R. (2 A)	York	Fort Mill
Cook, L. A. (3 A)	Laurens	Fountain Inn
Cooley, T. F. (3 A)	Abbeville	Lowndesville
Cooper, J. R. (4 E E)	Anderson	Belton
Cooper, P. F. (3 E)	Bamberg	Denmark
Cooper, W. A. (1 A & S)	Bamberg	Denmark
Copeland, L. B. (1 E)	Florence	Timmons ville
Copeland, T. H. (2 A)	Laurens	Clinton
Corbett, T. B. (4 M E)	Colleton	Wanersboro
Corley, C. E. (1 E)	Lexington	Lexington
Corley, J. S. (1 A)	Saluda	Saluda
Corley, S. R. (3 A)	Lexington	Lexington
Cornwall, V. B. (2 C)		Alto, Ga.
Courtney, James H. (2 Ar)	Aiken	Aiken
Covington, C. A. (1 E)	Mariboro	Bennettsville
Cox, F. M. (4 M E)	Anderson	Belton
Cox, R. C. (1 A)	Spartanburg	Woodruff
Crain, M. C. (4 A 1)	Greenville	Taylors
Craig, W. D. (1 E)	Lancaster	Lancaster
Craven, W. B. (2 A)	Marion	Gresham
Crawford, A. W. (1 A)	Pickens	Calhoun
Crawford, W. S. (1 A)	Pickens	Clemson College
Croft, N. C. (1 A & S)	Aiken	Aiken
Cromer, L. E. (4 A 5)	Oconee	Seneca
Cromer, N. C. (4 A 7)	Anderson	Belton
Crook, M. D. (3 C E)	York	Fort Mill
Crosland, R. E. (2 A)	Marlboro	Bennettsville
Cullum, F. E. (4 C E)	Lexington	Batesburg
Cunningham, H. W. (2 E)	Lee	Bishopville
Cunningham, J. W. (3 Ar)	Sumter	Sumter
Cureton, R. H. (4 C E)	Greenville	Greenville
Cuttino, B. H. (3 E)	Sumter	Sumter
Cuttino, D. S. (3 Ar)		Newnan, Ga.
Cuttino, W. H. (3 E)	Greenville	Greenville
Cuttino, P. F. (1 E)	Greenville	Greenville
Daniel, M. R. (2 E)	Bamberg	Bamberg
Dargan, W. C. (3 A)	Darlington	Darlington
Davidson, L. S. (3 A & S)	Kershaw	Camden
Davis, B. C. (1 A)	Darlington	Hartsville
Davis, B. W. (3 C E)	Greenville	Greenville
Davis, G. N. (2 C E)	Marion	Centenary

Davis, H. L. (2 A)	Spartanburg	Spartanburg
Davis, J. L. (1 E)	Oconee	Walhalla
Davis, J. N. (2 A)	Laurens	Ware Shoals
Davis, R. R. (3 E)		Tocoa, Ga.
Davis, St. C. (2 C E)	Marion	Centenary
Deadwyler, W. C. (1 E)	Greenwood	Greenwood
Deer, H. G. (1 A)	Charleston	Yonges Island
Dial, W. A. (4 M E)	Laurens	Cross Hill
Dickinson, G. M. (2 C)	Bamberg	Bamberg
Dickson, R. W. (2 A)	Clarendon	Manning
Dill, R. C. (4 E E)	Greenville	Greenville
Dill, T. E. (2 T)	Greenville	Greenville
Dobson, C. R. (4 Ar)	Lancaster	Lancaster
Dobson, J. H. (1 E)	Lancaster	Lancaster
Donaldson, J. H. (4 Ar)	Georgetown	Georgetown
Dority, M. A. (1 A)	Darlington	Timmons ville
Dorn, T. E. (4 A 5)	Greenwood	Greenwood
Dorsett, H. W. (1 E)	Saluda	Ridge Spring
Dowling, C. B. (4 E E)	Lexington	Swansea
Drake, H. B. (3 CE)	Anderson	Pelzer
Drake, W. S. (1 E)	Anderson	Honea Path
Drummond, L. J. (1 Ar)	Greenville	Fountain Inn
DuBose, W. P. (2 E)	Darlington	Darlington
Ducker, F. C. (1 E)	Sumter	Sumter
Duffie, F. H. (2 A)	Saluda	Saluda
Duffie, G. S. 1 A)	Saluda	Saluda
Duggan, I. W. (S)		Clayton, Ga.
Duggan, O. R. (4 E E)	Spartanburg	Cedar Springs
Dukes, V. (1 Ar)	Orangeburg	Branchville
Dunlap, G. H. (3 T E)	York	Smith's Turnout
Dunlap, O. P. (1 A)	Anderson	Honea Path
DuPre, A. J. (2 A & S)	Richland,	Columbia
DuPre, E. C. (1 A)	Richland,	Columbia
DuPre, G. C. (4 M E)	Richland,	Columbia
DuRant, C. (1 E)	Clarendon	Manning
Durst, G. G. (1 A)	Greenwood	Greenwood
Durst, W. P. (3 T E)	Greenwood	Greenwood
Eaddy, J. M. (2 A)	Florence	Leo
Eadie, M. D. (3 T E)		Brunswick, Ga.
Earle, J. E. (4 C E)	Anderson	Starr
Earle, S. B. (1 E)	Oconee	Clemson College
Earle, T. B. (2 E)	Oconee	Walhalla
Early, E. B. (3 A)	Orangeburg	Orangeburg
Edwards, B. L. (2 C E)	Laurens	Fountain Inn
Eison, F. J. (2 E)	Union	Jonesville
Ellis, E. S. (3 A & S)	Greenwood	Greenwood
Ellis, J. T. (2 A)	Spartanburg	Woodruff
Elvington, P. L. (1 A)	Horry	Nienols
England, B. M. (1 A)	Oconee	Westminster
Epting, E. L. (2 E)	Newberry	Peak
Ervin, E. D. (2 E)	Darlington	Darlington
Eskew, H. L. (3 E)	Greenville	Greenville
Etheredge, T. J. (4 E E)	Lexington	Batesburg
Evans, D. D. (2 E)	Florence	Pamplico
Evans, L. C. (1 E)	Orangeburg	Orangeburg

Evans, W. B. (1 A)	Greenville	Travelers Rest
Farmer, R. E. (3 C E)	Florence	Florence
Farr, F. B. (1 E)		Brunswick, Ga.
Farrar, M. B. (3 A & S)	Spartanburg	Spartanburg
Faris, J. F. (1 A)	York	Catawba
Faulkenberry, G. E. (2 T)	York	Rock Hill
Faust, C. C. (4 M E)	Bamberg	Denmark
Felder, R. P. (2 A)	Clarendon	Summerton
Fennell, C. S. (3 C E)	Hampton	Hampton
Fennell, J. R. (2 E)	York	Rock Hill
Ferguson, J. G. (1 E)	York	York
Ferguson, T. F. (3 A)	Abbeville	Abbeville
Fike, C. W. (2 C E)	Spartanburg	Spartanburg
Finn, P. S. (1 E)	Sumter	Sumter
Fishburne, F. J. (4 EE)	Charleston	Charleston
Fishburne, J. G. (3 A)	Colleton	Walterboro
Fisher, J. H. (1 A)	Abbeville	Antreville
Fogle, J. L. (3 A)	Bamberg	Denmark
Ford, A. H. (1 E)	Georgetown	Georgetown
Ford, J. G. (3 A)	Dillon	Lake View
Foster, J. R. (2 A)	Spartanburg	Woodruff
Foster, W. M. (1 E)	Spartanburg	Chesnee
Fowler, B. R. (3 A)	Greenville	Greenville
Franklow, M. L. (4 A & S)	Lexington	Leesville
Fraser, B. P. (2 E)	Georgetown	Georgetown
Fraser, C. A. (1 E)	Greenville	Greenville
Freeman, B. (1 A)	Pickens	Clemson College
Fripp, A. L. (2 A)	Anderson	Pendleton
Funderburk, O. F. (2 T)	Chester	Great Falls
Gaffney, J. B. (1 E)	Cherokee	Gaffney
Gaines, F. P. (2 C E)	Oconee	Westminister
Gaines, J. P. (1 A)	Pickens	Central
Galloway, C. W. (1 A)	Darlington	Hartsville
Galloway, J. C. (2 Ar)	Lee	Lynchburg
Galloway, W. B. (1 E)	Lec	Lynchburg
Galloway, W. C. (3 E)	Greenville	Greenville
Gantt, J. H. (3 E)	Pickens	Pickens
Gantt, W. D. (1 E)	Pickens	Pickens
Garrison, B. F. (1 A)	Anderson	Anderson
Garrison, J. C. (3 CE)	Pickens	Easley
Garrison, R. H. (4 A 5)	Anderson	Sandy Springs
Gassaway, J. L. (1 A)	Anderson	Anderson
Gassaway, M. B. (1 A)	Anderson	Honea Path
Gaston, L. D. (4 EE)	Spartanburg	Reidville
Gault, H. S. (3 CE)	Spartanburg	Glendale
Geddings, E. N. (3 A)	Sumter	Sumter
Geddings, M. T. (1 A)	Sumter	Wedgefield
Gerrard, F. H. (4 A 7)	Anderson	Anderson
Gibson, D. A. (4 TE)		Morrisville, N. C.
Gibson, J. R. (2 CE)	Greenville	Greenville
Gibson, P. R. (2 A)	Chester	Blackstock
Gillespie, D. D. (3 CE)	Oconee	Seneca
Gillespie, S. L. (4 EE)	Darlington	Hartsville
Gillam, J. C. (1 E)	Bamberg	Denmark
Gilmer, J. C. (2 T)	Anderson	Anderson
Gilmore, H. K. (1 E)	Hampton	Yamasee

Glaze, C. H. (3 CE)	Richland	Columbia
Godfrey, A. B. (3 A)	Cherokee	Gaffney
Goff, H. B. (4 A 5)	Saluda	Leesville
Goodman, J. S. (1 E)	York	Rock Hill
Goodyear, C. P. (4 A 5)	Marion	Nichols
Googe, W. J. (4 EE)	Allendale	Fairfax
Gowan, R. G. (1 E)	Spartanburg	Inman
Graham, L. H. (2 E)	Anderson	Anderson
Graves, J. A. (1 E)	Abbeville	Abbeville
Gray, J. W. (2 T)	Darlington	Darlington
Gregg, C. E. (1 E)	Florence	Mars Bluff
Green, C. D. (3 T)	Spartanburg	Spartanburg
Greene, J. W. (4 EE)	Greenville	Greenville
Grice, H. S. (4 A 5)	Saluda	Ward
Griffin, R. C. (2 A)	Anderson	Anderson
Griffin, W. B. (2 A&S)	Pickens	Cateechee
Grimsley, C. L. (1 E)	Marion	Mullins
Gunnells, C. (1 A)	Bamberg	Olar
Guy, J. H. (3 Ar.)	Richland	Columbia
Guy, J. L. (1 E)	Richland	Columbia
Guy, J. W. (2 E)	Chester	Chester
Gyles, H. E. (1 E)	Aiken	Aiken
Hafers, H. P. (3 E)	Aiken	Aiken
Hair, H. B. (1 A)	Calhoun	North
Hair, J. C. (3 C)	Barnwell	Blackwell
Hall, R. M. (2 E)	Anderson	Pendleton
Hammett, R. D. (2 E)	Sumter	Sumter
Hamilton, J. M. (1 E)	Aiken	Graniteville
Hammett, H. T. (1 E)	Greenville	Tailors
Hamrick, F. G. (4 A 5)	Cherokee	Gaffney
Hane, A. W. (3 A)	Calhoun	St. Matthews
Hane, H. T. (3 A)	Calhoun	Fort Motte
Hane, W. W. (1 A)	Calhoun	Fort Motte
Hanes, R. A. (1 A)	Dillon	Dillon
Hanna, M. L. (2 T)	Laurens	Laurens
Hanner, T. G. (3 CE)	Florence	Florence
Hardee, H. M. (3 E)	Florence	Florence
Hardee, J. H. (4 EE)	Florence	Florence
Harmon, C. H. (1 A)	Lexington	Lexington
Harmon, T. (3 CE)	Spartanburg	Spartanburg
Harper, C. A. (1 Ar.)	Hampton	Estill
Harper, J. L. (2 CE)	Spartanburg	Spartanburg
Harper, S. B. (1 E)	Anderson	Anderson
Harrell, J. C. (3 A)	Marion	Marion
Harrington, R. C. (3 T)	Williamsburg	Greelyville
Harris, S. P. (3 A)	Anderson	Belton
Harrison, W. S. (3 TE)	Spartanburg	Moore
Hart, L. W. (3 A)	Orangeburg	Vance
Harter, J. W. (2 E)	Allendale	Fairfax
Harvey, B. C. (3 A&S)	Cherokee	Gaffney
Harvey, L. H. (1 A)	Berkeley	Pinopolis
Harvin, S. A. (2 A)	Sumter	Sumter
Haskell, A. C. (4 A 4)	Aiken	Augusta, Ga.
Hatchett, O. B. (1 PM)	Spartanburg	Inman
Hawkins, J. F. (2 A)	Florence	Lake City

Hayden, E. C. (4 A 7)	Orangeburg	Cope
Hayden, T. J. (4 C E)	Chester	Great Falls
Hayes, R. A. (1 E)	Anderson	Anderson
Hays, W. L. (1 A)	Anderson	Starr
Heard, L. M. (2 A and S)	Anderson	Belton
Heller, H. (2 A and S)	Oconee	Seneca
Heller, J. N. (3 E)	Anderson	Sandy Springs
Hembree, E. E. (1 E)	Charleston	Ravenel
Hendee, M. H. (4 E E)		Augusta, Ga.
Henderson, L. N. (1 E)	Fairfield	Blairs
Henderson, W. N. (3 T)	Greenwood	Verdery
Hendrix, F. F. (1 A)	Greenville	Greenville
Hendrix, F. H. (1 A)	Lexington	Leesville
Hendrix, H. B. (1 A)	Lexington	Lexington
Hendrix, J. P. (2 A)	Spartanburg	Duncan
Hendrix, T. J. (4CE)	Spartanburg	Duncan
Herndon, G. B. (1 A)	Berkeley	Moncks Corner
Herndon, R. L. (2 A)	Marlboro	Bennettsville
Herring, W. H. (3 A)	Marion	Marion
Herron, J. L. (4 A 2)	Anderson	Starr
Heustess, J. H. (1 A)	Darlington	Hartsville
Hewer, W. F. (1 A)	Pickens	Clemson College...
Hewitt, B. L. (1 A)	Darlington	Darlington
Hewlett, L. M. (3 A)	Allendale	Appleton
Hicks, J. A. (1 Ar)	Darlington	Hartsville
Hicks, J. O. (3 Ar)		Lexington, N. C
Hicks, J. R. (S)	Darlington	Hartsville
Hicks, M. H. (4 EE)	Darlington	Hartsville
Higgins, E. E. (2 Ar.)	Pickens	Easley
Higgins, R. C. (3 E)	Georgetown	Georgetown
Hightower, R. E. (3 E)	Bamberg	Denmark
Hiller, B. K. (1 E)	Richland	Chapin
Hills, J. B. (1 A)	Charleston	Edisto Island
Hindman, H. S. (1 Ar)	Anderson	Pelzer
Hines, A. M. (1 E)		Auburndale, Fla.
Hinnant, J. L. (4 EE)	Richland	Blythewood
Hinson, R. L. (1 PM)	Florence	Scranton
Hitt, G. L. (1 Ar)	Anderson	Belton
Hodges, R. G. (1 E)	Marion	Marion
Hoefer, H. W. (2 E)	Richland	Columbia
Hoke, F. M. (2 T)	Cherokee	Blacksburg
Holland, W. G. (2 E)	Colleton	Pattillo
Holman, F. W. (3 A & S)	Florence	Florence
Hope, G. M. (2 A & S)	Bamberg	Denmark
Hope, T. A. (1 E)	York	Rock Hill
Horton, R. G. (1 A)	Chesterfield	Jefferson
Hough, W. B. (1 E)	Kershaw	Camden
Howard, R. C. (1 E)		Savannah, Ga.
Howard, W. F. (1 PM)	Spartanburg	Lyman
Howle, R. M. (2 A)	Darlington	Hartsville
Huckabee, J. W. (1 E)	Abbeville	Lowndesville
Hudgens, E. S. (1 E)		Flat Rock, N. C.
Hudgens, J. A. (1 A)		Flat Rock, N. C.
Hudgens, W. W. (3 Ar)	Anderson	Williamson
Hudson, G. E. (3 A)	Spartanburg	Spartanburg

Hudgins, J. P. (1 A)	Horry	Nichols
Hughes, T. M. (1 E)	Lancaster	Lancaster
Hughes, W. F. (1 E)	York	Rock Hill
Hughston, T. L. (3 CE)	Spartanburg	Spartanburg
Huephrey, C. J. (3 CE)	Florence	Timmons ville
Hunt, D. W. (1 E)	Greenville	Greenville
Hunt, T. W. (1 A)	Oconee	Townville
Hunter, R. L. (1 E)	Laurens	Clinton
Hunter, W. I. (1 Ar)	Bamberg	Bamberg
Husbands, H. (1 CE)	Florence	Florence
Hutchins, G. S. (3 A and S)	Spartanburg	Spartanburg
Hutchins, W. C. (3 E)	Spartanburg	Spartanburg
Hutchinson, J. T. (1 E)	Pickens	Easley
Hutto, S. G. (4 A 7)	Bamberg	Denmark
Imes, G. C. (2 T)		Griffin, Ga.
Jackson, C. A. (2 CE)	Sumter	Horatio
Jackson, H. L. (1 A)	Sumter	Horatio
Jackson, L. S. (3 E)	Orangeburg	Orangeburg
Jackson, M. P. (1 E)	Florence	Florence
James, J. H. (4 A 5)	Greenville	Greer
James, W. C. (3 A)	Greenville	Greer
Jameson, A. O. (1 A & S)	Anderson	Liberty
Jameson, P. H. (3 A)	Anderson	Liberty
Jeffers, R. 2 A)	Orangeburg	Holly Hill
Jenkins, J. M. (2 A)		Crowley, La.
Jeter, E. C. (3 A)	Fairfield	Wallaceville
Johnson, E. V. (2 A & S)	Spartanburg	Arcadia
Johnson, H. E. (3 T)	Anderson	Anderson
Johnson, W. P. (4 A & S)	Spartanburg	Inman
Johnston, H. K. (1 E)	Hampton	Luray
Jolly, R. A. (1 A)	Anderson	Anderson
Jones, A. W. (1 A)	Marion	Nichols
Jones, A. S. (3 E)	Oconee	Walhalla
Jones, F. L. (1 A)	Anderson	Starr
Jones, F. N. (1 A & S)	Colleton	Ashton
Jones, H. W. (2 A)	Aiken	Earle
Jones, J. A. (3 E)	Florence	Florence
Jones, J. F. (1 A)	Fairfield	Bookman
Jones, J. G. (3 A)	Spartanburg	Crescent
Jones, L. E. (2 E)	Pickens	Dacusville
Jones, M. A. (3 E)	Richland	Columbia
Jones, M. H. (3 CE)	Florence	Florence
Jones, M. W. (1 A & S)		Augusta, Ga.
Jones, O. F. (4 A 5)	Pickens	Easley
Jones, R. C. (4 CE)	Bamberg	Bamberg
Jones, R. M. (1 A)	Anderson	Starr
Jones, S. E. (3 A)	Greenville	Greer
Jones, W. E. (4 A 1)	Kershaw	Bethune
Jordan, E. P. (2 E)	Spartanburg	Spartanburg
Jordan, J. A. (3 A)	Chester	Richburg
Josey, F. H. (1 E)	Lee	Bethune
Jourdain, J. E. (1 E)	Calhoun	Ellorée
Kay, C. W. (2 A & S)	Anderson	Belton
Kay, W. H. (2 E)	Anderson	Honea Path
Keenan, H. E. (4 Ar)	Aiken	Graniteville

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Keisler, B. E. (1 A)	Lexington	Gilbert
Keisler, J. G. (2 A)	Lexington	Gilbert
Keith, J. A. (1 E)	Pickens	Pickens
Kellers, F. (1 E)	Laurens	Clinton
Kelley, J. W. (1 E)	Anderson	Williamston
Kelley, W. G. (3 E)	Anderson	Pelzer
Kershaw, J. (4 ME)		Augusta, Ga.
Kennedy, J. A. (1 E)	Spartanburg	Spartanburg
Keyserling, L. L. (4 EE)	Beaufort	Beaufort
Killingsworth, H. M. (2 E)	Barnwell	Barnwell
Kinard, A. R. (1 E)	Bamberg	Ehrhardt
Kinard, F. W. (4 C)	Lexington	Leesville
King, C. J. (2 T)	Sumter	Sumter
King, G. N. (1 A)	Oconee	Townville
King, J. L. (3 A)	Anderson	Belton
King, J. N. (4 CE)	Cherokee	Gaffney
Kinsler, J. F. (2 Ar)	Pickens	Central
Kirkland, R. C. (2 CE)	Bamberg	Ehrhardt
Kirkley, F. E. (2 A)	Kershaw	Kershaw
Kirton, J. D. (2 EE)	Williamsburg	Cades
Kitchen, T. W. (4 T)	Greenville	Greenville
Kline, W. N. (2 E)		Savannah, Ga.
Klugh, G. F. (3 A)		Atlanta, Ga.
Klugh, W. W. (4 A7)	Pickens	Clemson College
Knight, J. D. (4 EE)	Chesterfield	Angelus
Knight, J. G. (1 A)	Anderson	Belton
Knobloch, L. G. (3 A & S)	Charleston	Charleston
Knotts, E. I. (1 A)	Orangeburg	North
Knotts, F. L. (3 E)	Orangeburg	North
Knotts, R. E. (1 A)	Orangeburg	North
Knopf, B. A. (2 C)	Allendale	Fairfax
Koon, O. R. (3 A)	Richland	Peak
Lachicotte, F. W. (2 E)		Charlotte, N. C.
Langford, C. H. (3 A)	Richland	Blythewood
Lancaster, W. A. (1 E)	Allendale	Fairfax
Langston, W. A. (2 A)	Florence	Timmons ville
Latham, C. G. (3 A)	York	York
Lathrop, H. A. (1 E)	Charleston	Charleston
Lawson, R. A. (2 E)	Charleston	Charleston
Lawton, J. M. (1 A & S)	Hampton	Garnett
Lee, H. M. (1 Ar)	Spartanburg	Landrum
Lee, L. L. (1 A)	Oconee	Walhalla
Less, S. A. (4 E)	Orangeburg	Orangeburg
Leitner, L. T. (1 E)	Marion	Marion
Lemmon, J. L. (1 A)	Lee	Lynchburg
Lenhardt, B. F. (4 A 1)	Pickens	Easley
Lesesne, F. F. (3 A)	Williamsburg	Greeleyville
Lester, J. E. (1 E)		Hogansville, Ga.
Leverett, P. B. (2 E)	Richland	Columbia
Levin, J. D. (3 Ar.)	Beaufort	Beaufort
Lewis, C. S. (2 E)		Crowley, La.
Lewis, H. C. (1 A)	Horry	Aynor
Lewis, R. E. L. (1 A)	Horry	Aynor
Lide, J. S. (1 A)	Marlboro	Bennettsville
Liles, S. E. (4 CE)	Marlboro	McColl

Lineberger, C. H. (3 CE)	Greenville	Greenville
Link, A. C. (3 TE)	York	Fort Mill
Linton, W. T. (3 CE)	Pickens	Clemson College
Lipscomb, R. W. (3 A)	Cherokee	Gaffney
Little, T. R. (4 CE)	Anderson	Starr
Littlejohn, H. A. (2 A & S)	Anderson	Belton
Littlejohn, J. E. (2 A)	Union	Jonesville
Livingston, E. M. (1 A)	Orangeburg	North
Lomas, C. H. (3 A)	Richland	Columbia
London, H. R. (2 A & S)	Cherokee	Blacksburg
Long, E. M. (4 EE)	York	Rock Hill
Long, R. F. (1 E)	Fairfield	Blairs
Love, J. F. (1 A)	York	McConnell
Lupo, W. O. (2 A)	Dillon	Lake View
Lyon, R. E. (1 E)	McCormick	Plum Branch
McAbee, T. R. (2 CE)	Spartanburg	Inman
McCall, J. L. (1 Ar)	York	Clover
McCarley, H. D. (1 A & S)	Richland	Columbia
McCarley, R. J. (1 E)	Richland	Columbia
McCarley, T. H. (2 T)	Anderson	Anderson
McCauley, H. R. (2 E)	Greenville	Greenville
McCauley, J. H. (2 E)	Greenville	Greenville
McClain, R. N. (2 A)	Spartanburg	Campobello
McClendon, G. B. (2 E)	Barnwell	Elko
McClure, P. J. (1 E)	Spartanburg	Cherokee
McComb, J. C. (1 A)	McCormick	Troy
McComb, J. R. (2 A)	Abbeville	Abbeville
McConnell, R. E. (3 A)	Anderson	Anderson
McCracken, H. E. (4 A 2)	Richland	Hopkins
McCrary, J. A. (1 A)	Anderson	Pendleton
McCravy, J. R. (1 P. M.)	Pickens	Easley
McCrary, J. B. (1 A)	Chester	Richburg
McCutchen, G. H. (3 A)	Lee	Bishopville
McDaniel, E. P. (1 E)	Pickens	Pickens
McDaniel, L. F. (1 Ar)	Richland	Columbia
McDaniel, S. W. (4 Ar)	Beaufort	Beaufort
McDonald, E. M. (2 E)	Charleston	Charleston
McDowell, H. E. (3 CE)	York	Rock Hill
McDowell, L. E. (1 E)	Spartanburg	Spartanburg
McElmurray, J. G. (1 A)		Augusta, Ga.
McElveen, A. T. (1 T)	Aiken	Langley
McFadden, A. R. (1 A)	Clarendon	Gable
McFaddin, J. J. (1 E)	Clarendon	Gable
McGee, H. A. (2 E)	Colleton	Walterboro
McGee, R. L. (2 A)	Anderson	Belton
McGee, W. L. (1 A)	Anderson	Starr
McGill, T. J.	Richland	Columbia
McGlone, T. F. (3 A & S)	Spartanburg	Spartanburg
McIntosh, L. (1 A)	Darlington	Dovesville
McKemie, W. J. (4 TE)		Atlanta, Ga.
McKeown, S. M. (4 TE)	Chester	Cornwall
McKinney, J. W. (1 A)	Pickens	Easley
McLean, J. E. (S)	Pickens	Central
McLeod, C. E. (4 A7)	Beaufort	Beaufort
McLeod, J. B. (2 E)	Darlington	Hartsville
McLeod, V. C. (1 E)	Lee	Camden

McLeod, W. H. (1 A)	Beaufort	Beaufort
McLeod, W. N. (1 E)	Lee	Bishopville
McLeskey, J. J. (2 CE)	Oconee	Westminister
McMeekin, A. R. (1 A)	Fairfield	Wallaceville
McMeekin, C. L. (1 A & S)	Fairfield	Monticello
McMeekin, R. P. (3 CE)	Fairfield	Jenkinsville
McMillan, C. (1 A)	Saluda	Saluda
McMillan, F. W. (4 TE)	Marion	Mullins
McMillan, R. F. (2 A)	Abbeville	Abbeville
McNeace, J. C. (2 E)	Anderson	Anderson
McPhail, J. W. (3 A)	Anderson	Anderson
McPhail, S. (3 A)	Anderson	Anderson
McPherson, J. M. (1 E)	Georgetown	Georgetown
McTeer, J. R. (4 EE)	Colleton	Walterboro
McWhorter, W. C. (1 A)	Pickens	Norris
Macfie, W. H. (3 E)	Fairfield	Winnsboro
McIntosh, C. D. (S)	Spartanburg	Tucapau
Maddox, W. B. (2 E)	Anderson	Anderson
Magill, R. V. (1 E)	Greenville	Greenville
Mahaffey, C. R. (2 E)	Anderson	Townville
Major, J. D. (4 A 1)	Anderson	Belton
Major, S. M. (3 A)	Anderson	Belton
Maner, W. F. (3 A)	Allendale	Allendale
Mangum, W. S. (S)	Marlboro	McColl
Marshbanks, J. C. (3 A)	Anderson	Anderson
Marshall, L. E. (3 E)	Richland	Columbia
Marshall, R. M. (4 EE)	Beaufort	Beaufort
Martin, A. H. (1 E)	Lexington	Swansea
Martin, A. R. (1 E)	Anderson	Anderson
Martin, C. R. (2 E)	Greenville	Greenville
Martin, H. M. (1 E)	Marion	Mullins
Martin, J. (2 T)	Oconee	Westminister
Martin, J. S. (1 A & S)	Fairfield	Strother
Martin, L. K. (3 A)	Greenwood	Ninety Six
Martin, S. P. (3 A & S)	Anderson	Pendleton
Martin, W. E. (2 A)	Anderson	Anderson
Martin, W. J. B. (S)	Greenville	Simpsonville
Martin, W. N. (3 E)	Greenville	Greenville
Martin, W. T. (3 A)	Spartanburg	Chesnee
Marvin, H. W. (3 E)	Colleton	White Hall
Massebeau, C. C. (2 A)	Spartanburg	Woozuh
Massey, L. B. (4 A 5)	Anderson	Pendleton
Matheney, W. L. (1 E)	Pickens	Pickens
Mathis, Q. E. (1 Ar.)	Florence	Timmons ville
Matthews, R. H. (1 T)	Newberry	Whitmire
Mattison, J. A. (2 A&S)	Anderson	Belton
Mattison, W. T. (1 A)	Abbeville	Honea Path
Maxwell, J. A. (3 E)	Spartanburg	Spartanburg
Maxwell, W. C. (4 A 6)		Rydal, Ga.
Mayer, J. H. (2 CE)	Greenwood	Greenwood
Mays, W. E. (2 Ar.)	Pickens	Easley
Mazyck, E. H. (1 E)	Florence	Timmons ville
Mazyck, H. B. (1 E)	Florence	Timmons ville
Mealing, J. P. (3 E)		Augusta, Ga.
Meares, G. A. (2 A)	Anderson	Pelzer
Meares, G. C. (1 E)	Horry	Nichols

Meetze, A. W. (1 C)	Lexington	Leesville
Mercer, C. W. (3 E)	Georgetown	Georgetown
Mercer, F. Y. (1 E)	Georgetown	Georgetown
Meredith, P. F. (4 Ar.)	Pickens	Central
Messervy, H. H. (1 A)	Charleston	Meggetts
Metze, G. E. (4 A&S)	Charleston	Charleston
Middleton, L. B. (1 E)	Charleston	Charleston
Midkiff, R. B. (3 CE)		Alexandria, Va
Mikell, G. L. (2 E)	Charleston	Edisto Island
Milford, T. S. (2 A)	Edgefield	Johnston
Miller, E. W. (1 E)	Marlboro	Bennettsville
Miley, P. (4 A 7)	Hampton	Brunson
Miller, H. S. (2 CE)	Oconee	Westminster
Miller, James D. (1 A)	Chesterfield	Jefferson
Miller, John D. (1 A)	Union	Jonesville
Miller, L. R. (4 EE)	Marlboro	Bennettsville
Miller, P. H. (4 TE)	Marlboro	Tatum
Miller, P. L. (2 E)		Hickory, N. C
Miller, R. O. (2 A)	Union	Jonesville
Miller, T. C. (2 A)	York	York
Milling, J. A. (4 A&S)	Greenwood	Greenwood
Mitchell, R. D. (2 CE)	Anderson	Belton
Mitchell, R. H. (4 EE)	Aiken	North Augusta
Mitchell, T. J. (2 C)		New Orleans, La.
Mitchell, W. E. (2 CE)	Greenville	Greenville
Moon, C. T. (S)	Oconee	Seneca
Moore, C. E. (1 E)	Spartanburg	Moore
Moore, F. H. (2 A&S)	York	Rock Hill
Moore, F. W. (1 E)	Spartanburg	Spartanburg
Moore, J. N. (3 A&S)	Anderson	Belton
Moore, L. B. (3 E)	Spartanburg	Spartanburg
Moore, V. E. (1 A&S)	Spartanburg	Duncan
Moore, W. F. (1 A)	Pickens	Calhoun
Moorehead, L. D. (1 A)	Anderson	Sandy Springs
Morrison, H. L. (1 A)	Charleston	McClellansville
Morrison, W. T. (1 A)	Anderson	Starr
Morton, E. H. (2 E)	Greenville	Greenville
Motes, J. H. (2 E)	Laurens	Mountville
Mouldous, A. D. (1 PM)	Richland	Columbia
Moxon, J. G. (1 A)	Hampton	Varnville
Mullikin, T. S. (1 A)	Anderson	Pendleton
Mundy, J. T. (3 E)	Richland	Columbia
Murdock, E. C. (2 A)	Abbeville	Antreville
Murrah, E. S. (3 E)	Union	Union
Murray, C. Q. (1 E)	Charleston	Charleston
Murphree, J. H. (1 A&S)	Pickens	Central
Nalley, R. F. (2 A)	Pickens	Easley
Neely, C. C. (1 E)	York	Ogdon
Nettles, W. C. (1 A)	Sumter	Sumter
Neves, C. A. (1 A)	Greenville	Taylor
Newman, C. C. (4 A 7)	Oconee	Clemson College
Nichols, P. M. (4 A&S)	Newberry	Silver Street
Nickles, W. D. (4 EE)	Anderson	Pelzer
Nimitz, F. K. (1 E)	Charleston	Charleston
Norman, E. H. (1 E)		Chattanooga, Tenn.
Norris, J. G. (3 A)	Greenville	Piedmont
Norton, E. L. (3 A)		Gibson, N. C.

O'Dell, J. B. (2 A)	Pickens	Liberty
O'Dell, O. A. (2 A)	Pickens	Liberty
O'Dell, W. R. (3 A)	Pickens	Liberty
Oliver, E. F. (3 A)	Williamsburg	Greelyville
O'Quinn, J. D. (2 A)	Colleton	Williams
Osteen, P. C. (1 A&S)	Anderson	Anderson
Osteen, W. E. (2 E)	Florence	Florence
Outlaw, L. E. (1 E)	Kershaw	Bethune
Owen, S. G. (3 E)	Greenwood	Greenwood
Owens, W. B. (1 Ar)	Laurens	Clinton
Padgett, A. H. (1 T)	Oconee	Seneca
Padgett, L. C. (3 E)	Colleton	Green Pond
Padgett, O. D. (1 A)	; Edgefield	Edgefield
Page, W. (4 A 5)	Horry	Galivants Ferry
Pardue, W. A. (4 T)	Edgefield	Trenton
Parham, W. C. (1 A)	Charleston	Charleston
Parker, E. M. (1 Ar.)		Emporia Va.
Parker, G. F. (3 E)	Florence	Ebenezer
Parker, J. B. (1 E)	Anderson	Anderson
Parker, J. R. (2 A)	Anderson	Iva
Parler, M. L. (4 Ar.)	Sumter	Wedgfield
Parnell, C. L. (4 A 7)	Jasper	Gillisonville
Partridge, J. F. (3 E)	Pickens	Pickens
Partridge, W. F. (1 E)	Pickens	Pickens
Patrick, C. H. (3 A)	Hampton	Varnville
Patterson, H. F. (2 CE)	Anderson	Williamston
Patterson, J. W. (1 E)	Florence	Timmons ville
Pearman, F. E. (2 A)	Anderson	Anderson
Pearman, S. D. (2 A)	Anderson	Anderson
Pearson, W. D. (1 Ar.)	Fairfield	Strother
Pepper, B. B. (2 A)	Pickens	Easley
Percival, J. H. (2 T)	York	Rock Hill
Perry, C. F. (3 CE)	Greenville	Greenville
Phillips, C. Y. (4 CE)	Pickens	Norris
Philpot, C. P. (3 E)	Laurens	Laurens
Philpot, I. H. (1 A&S)	iPickens	Dacusville
Pickelsimer, D. L. (4 T)	Anderson	Piedmont
Pickens, R. O. (3 T)	Spartanburg	Spartanburg
Pitts, I. S. (2 T)	Oconee	Westminster
Pitts, J. D. (3 A&S)	York	Rock Hill
Pitts, L. W. (1 A)	Saluda	Saluda
Player, J. W. (2 E)	Lee	Elliott
Player, W. W. (2 A)	Lee	Elliott
Plexico, M. E. (1 A)	York	Rock Hill
IPyler, A. A. (1 A)	Lancaster	Lancaster
Pcag, J. R. (1 E)	York	Rock Hill
Poe, H. D. (2 E)	Chesterfield	Cheraw
Pollard, V. B. (1 Ar.)	Greenville	Simpsonville
Ponder, J. M. (1 A)	Pickens	Dacusville
Poole O. L. (2 A&S)	Spartanburg	Spartanburg
Poore, M. L. (2 CE)	Anderson	Belton
Porcher, P. G. (3 A)	Charleston	Mount Pleasant
Poston, H. E. (1 Ar.)	Florence	Lake City
Powell, W. E. (1 E)	Aiken	Graniteville
Power, S. R. (1 Ar.)	Cherokee	Blacksburg
Powers, G. F. (2 A)	Marion	Marion
Preacher, G. L. (2 Ar.)		Atlanta, Ga.

Pressley, O. K. (2 A)	Chester	Chester
Pressley, W. H. (3 A)	Greenwood	Verdery
Price, J. M. (2 E)	Orangeburg	Norway
Prichard, B. E. G. (1 A)	Oconee	Westminster
Pridmore, R. G. (2 A)	Cherokee	Gaffney
Prim, J. M. (1 E)		Brunswick, Ga.
Pruitt, E. A. (1 A)	Anderson	Belton
Pruitt, T. W. (1 E)	Anderson	Anderson
Pruitt, W. H. (4 A 2)	Anderson	Anderson
Pruitt, W. R. (3 E)	Anderson	Anderson
Pugh, G. J. (1 E)	Newberry	Prosperity
Pursley, L. H. (3 A)	York	York
Purvis, E. R. (3 A)	Florence	Florence
Ramseur, A. R. (1 E)	Oconee	Newry
Ramsay, R. S. (2 CE)	Hampton	Garnett
Ramsay, W. T. (3 Ar)	Oconee	Madison
Rasor, H. L. (4 A 5)	Greenwood	Donalds
Rawlinson, A. S. (1 A)	Clarendon	Davis Station
Ray, C (1 A)	Oconee	Walhalla
Ray, C. E. (2 A)	Barnwell	Blackwell
Reames, C. S. (1 E)	Lee	Bishopville
Reaves, J (2 A & S)	Clarendon	Alcolu
Reese, L. W. (1 E)		Emporia, Va.
Redfern, W. H. (2 Ar)		Charlotte, N. C.
Reed, L. B. (4 A 6)	Anderson	Anderson
Reeves, T. M. (2 A)	Colleton	Cottageville
Reynolds, C. M. (4 A & S)	Marlboro	Bennettsville
Reynolds, P. H. (3 E)	Lee	Bishopville
Richards, L. K. (S)	Oconee	Clemson College
Richardson, E. H. (2 CE)	Clarendon	Summerton
Richardson, M. B. (2 E)	Anderson	Pendleton
Richey, B. R. (3 A)	Greenwood	Ware Shoals
Richborn, J. H. (4 A 1)	Dorchester	Reevesville
Ridgeway, E. J. (3 A)	Clarendon	Jordan
Riley, E. (1 A)	Orangeburg	Cordova
Riley, W. J. (2 A)	Hampton	Garnett
Robbins, L. L. (2 E)	Dorchester	St. George
Roberson, S. R. (1 E)	Pickens	Easley
Robertson, E. H. (1 E)	Charleston	Charleston
Robinett, G. D. (2 CE)	Georgetown	Georgetown
Robinson, J. H. (3 CE)	Greenville	Greenville
Robison, S. O. (4 EE)	York	York
Rodgers, J. B. (1 E)	Richland	Columbia
Rodgers, G. B. (1 E)	Anderson	Belton
Rogers, A. J. (1 A)	Dillon	Fork
Rodgers, S. H. (2 CE)	Colleton	Walterboro
Rogers, C. M. (4 A & S)	Anderson	Pelzer
Rogers, J. I. (2 A)	Marlboro	Bennettsville
Rogers, J. T. (1 A)	Anderson	Pendleton
Rogers, L. A. (1 E)	Pickens	Easley
Rogers, W. E. (1 E)	Anderson	Pelzer
Rogers, W. M. (2 E)	Marlboro	Blenheim
Rosamond, J. E. (4 CE)	Greenville	Greenville
Rose, W. T. (2 E)	Clarendon	Sardinia
Ross, D. H. (4 CE)	Florence	Florence

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Ross, T. M. (3 Ar.)	Spartanburg	Spartanburg
Roth, L. (2 E)	York	York
Rush, F. S. (1 E)	Lexington	Lexington
Russell, H. E. (4 T)	Pickens	Easley
Sackman, G. W. (1 E)		Miami, Fla.
Salley, C. T. (4 CE)	Aiken	Salley
Salley, E. M. (4 ME)		Saluda, N. C.
Salley J. L. (1 A)	Orangeburg	Orangeburg
Sample, W. F. (1 A)	Saluda	Saluda
Sams, R. O. (4 EE)	Union	Jonesville
Sander, L. F. (2 E)	Charleston	Charleston
Sanders, H. I. (3 E)	Greenwood	Ninety Six
Sanders, R. W. (1 A)	Beaufort	Okatie
Sansburg, A. B. (1 E)	Florence	Timmons ville
Sartor, M. H. (1 A)	Union	Union
Schumacher, P. D. (1 PM)	Oconee	Walhalla
Scott, J. T. (4 EE)	Union	Jonesville
Scott, W. H. (2 A)	Greenville	Princeton
Scurry, J. F. (1 E)	Newberry	Chapetts
Seaborn, L. A. (4 CE)	Oconee	Walhalla
Seaborn, W. M. (3 CE)	Oconee	Walhalla
Sease, J. C. (1 E)	Newberry	Prosperity
Sexton, E. W. (2 A)	Anderson	Starr
Shands, H. L. (2 A)	Florence	Ebenezer
Sharp, G. W. (4 A 4)	York	Leslie
Sharp, H. D. (2 T)	York	Leslie
Sharp, V. G. (1 E)	Anderson	Pendleton
Shedd, J. G. (2 T)	Fairfield	Winnsboro
Shelley, L. W. (3 A)	Marion	Marion
Shelley, R. L. (1 A)		Tabor, N. C.
Sheppard, B. (3 A&S)	Orangeburg	Orangeburg
Sherrard, H. R. (1 A&S)	Anderson	Belton
Sherman, D. B. (2 Ar.)	Pickens	Clemson College
Sherrill, D. H. (2 E)	Marlboro	Bennettsville
Shillito, J. D. (1 E)	Bamberg	Denmark
Sholar, J. O. (3 E)	Sumter	Sumter
Shore, F. W. (4 A 5)	Spartanburg	Greer
Shull, W. G. (3 CE)	Greenville	Greenville
Simmons, E. F. (1 A)	Orangeburg	Orangeburg
Simpson, J. F. (2 A)	Richland	Columbia
Simpson, W. G. (2 T)	Anderson	Pendleton
Sims, E. F. (3 C)	Pickens	Central
Singleton, J. A. (1 E)	Anderson	Belton
Skinner, T. B. (4 A 5)	Spartanburg	Woodruff
Sloan, B. F. (1 A&S)	Oconee	Walhalla
Sloan, J. D. (2 E)	Anderson	Pendleton
Smith, C. T. (4 A 4)	Newberry,	Kinards
Smith, E. H. (S)	Marlboro	Clio
Smith, F. (1 A)	York	York
Smith, G. A. (4 TE)	Anderson	Anderson
Smith, G. E. (1 E)	Orangeburg	Orangeburg
Smith, G. F. (1 E)	Pickens	Liberty
Smith, H. A. (2 A)	Lexington	Lexington
Smith, J. A. (1 PM)	Marion	Mullins
Smith, M. G. (3 E)		Atlanta, Ga.
Smith, R. B. (1 E)	Union	Jonesville
Smith, R. L. (2 A)	York	York

Smith, R. L. (3 E)	Anderson	Starr
Smith, R. N. (1 E)		Savannah, Ga.
Smith, S. L. (3 E)	Aiken	Graniteville
Smith, S. T. (4 A 5)	Horry	Conway
Smith, T. E. (4 CE)	Orangeburg	Rowesville
Smith, T. L. (3 A)	Marion	Marion
Smith, T. W. (3 A)	Saluda	Saluda
Smith, W. C. (2 T)	Greenville	Green
Smith, W. Z. (1 A)	York	York
Smoak, H. H. (2 A)	Charleston	Meggett
Smoak, K. A. (2 T)	Bamberg	Denmark
Smoak, W. B. (S)	Bamberg	Bamberg
Smoke, W. G. (4 T)	Calhoun	St. Matthews
Smyth, T. L. (1 Ar.)		Hendersonville, N. C.
Snowden, H. C. (2 A)	Williamsburg	Hemmingway
Snyder, W. C. (1 E)		South Bethlehem, N. C.
Spencer, E. P. (4 A 2)		McFarlan, N. C.
Springer, E. F. W. (3 E)		Scotia, N. Y.
Stacy, L. O. (1 E)	York	Clover
Stacy, S. V. (2 A)	Cherokee	Gaffney
Stallings, W. K. (3 Ar.)	Spartanburg	Spartanburg
Steadman, C. L. (3 A)	Spartanburg	Spartanburg
Steinmeyer, J. H. (1 A)	Beaufort	Beaufort
Stephens, W. A. (1 Ar.)	Anderson	Williamston
Stephenson, J. A. (4 A 5)	York	Sharon
Stevenson, M. B. (2 A)	Marion	Marion
Stevensen, R. C. (2 E)	Fairfield	Winnsboro
Stevenson, W. B. (2 A)	Chester	Richburg
Stewart, T. C. (3 A)	Greenville	Simpsonville
Stewman, L. (3 E)	Lancaster	Lancaster
Stockman, J. W. (1 E)	Newberry	Prosperity
Stogner, J. R. (3 T)	Darlington	Hartsville
Stokes, T. L. (3 A)	Florence	Timmons ville
Stone, G. M. (2 A)	McCormick	Willington
Stoppelbein, H. E. (3 E)	Charleston	Charleston
Stoutamire, H. L. (4 A 5)	Orangeburg	Holly Hill
Strange, H. G. (2 E)	Fairfield	Winnsboro
Stribling, R. M. (2 T)		Waynesboro, Ga.
Strickland, J. R. (1 E)	Hampton	Fairfax
Stroman, C. W. (2 A)	Orangeburg	Cameron
Strowman, J. D. (2 A)	Orangeburg	Orangeburg
Stroud, E. W. (1 A)	Spartanburg	Woodruff
Stuckey, C. C. (S)	Darlington	McBee
Stutts, R. T. (3 T)	Union	Union
Suber, J. C. (2 CE)	Greenwood	Greenwood
Sumner, J. F. (2 T)	Darlington	Darlington
Sutherland, E. S. (4 CE)	Pickens	Pickens
Sweeney, R. L. (2 E)	Anderson	Anderson
Swofford, R. P. (1 Ar.)	Cherokee	Gaffney
Swedds, P. E. (4 A&S)	Anderson	Central
Talbert, J. H. (4 A 5)	McCormick	McCormick
Talley, J. H. (2 E)	York	Rock Hill
Tarrant, W. E. (4 T)	Greenville	Piedmont
Tatum, J. C. (2 CE)	Marlboro	McColl
Tatum, R. J. (2 A)	Marlboro	Tatum
Taylor, H. K. (3 A)	Laurens	Laurens
Taylor, J. M. (3 TE)	York	Rock Hill

Taylor, R. A. (2 A)	Greenville	Fountain Inn
Taylor, R. D. (1 A)	Marion	Nichols
Taylor, W. I. (2 A)	Hampton	Varnville
Templeton, E. C. (1 A)	Greenwood	Ninety Six
Thomas, J. R. (4 A&S)	Orangeburg	Cope
Thomas, L. P. (1 E)	Union	Carlisle
Thomason, G. L. (3 A)	Laurens	Gray Court
Thompson, A. G. (1 C)	Anderson	Starr
Thompson, S. W. L. (1 E)		Chattanooga, Tenn.
Thompson, Z. V. (3 E)		Smithfield, N. C.
Thomson, B. K. (2 E)	Spartanburg	Landrum
Thomson, D. P. (4 TE)	Oconee	Seneca
Thurmond, A. G. (2 A)	Edgefield	Edgefield
Tice, F. F. (2 E)	York	Rock Hill
Tiencken, W. P. (2 CE)	Charleston	Charleston
Tilley, W. E. (1 E)		Hendersonville, N. C.
Tillotson, J. E. (1 E)	Darlington	Hartsville
Timmerman, W. B. (1 PM)	Lexington	Batesburg
Timmerman, W. P. (3 A)	Lexington	Batesburg
Tinkler, J. (2 PM)	Greenwood	Ninety Six
Tollison, C. T. (1 A&S)	Anderson	Pelzer
Tomlinson, H. S. (1 E)	Florence	Olanta
Torchia, R. E. (1 E)		Savannah, Ga.
Townsend, E. H. (1 A)	Charleston	Martins Point
Townsend, T. (2 T)	Marlboro	Bennettsville
Troublefield, E. R. (1 A)	Sumter	Wedgefield
Trowbridge, J. E. (1 E)	Anderson	Anderson
Truesdale, E. V. (3 A)	Kershaw	Kershaw
Truluck, C. M. (2 E)	Florence	Motbridge
Tucker, H. C. (1 E)	Sumter	Sumter
Turner, C. M. (3 A)	Barnwell	Ellington
Turner, H. (2 E)	Spartanburg	Landrum
Turner, W. B. (3 A)	Barnwell	Ellington
Tuten, H. M. (2 A)	Colleton	Jacksonboro
Tuten, W. L. (2 A)	Jasper	Early Branch
Tyler, E. L. (3 E)		Broxton, Ga.
Tyler, R. T. (4 A 3)	Orangeburg	Orangeburg
Vallentine, J. G. (3 A & S)	Orangeburg	Cope
Valley, J. B. (2 E)	Orangeburg	Elloree
Vandiver, E. H. (3 E)	Pickens	Calhoun
Vaughn, F. E. (3 A)	Laurens	Fountain Inn
Vaughn, S. M. (2 T)	Anderson	Belton
Vaughan, T. L. (S)	Oconee	Clemson College
Venning, H. A. (2 A)	Clarendon	Manning
Verdery, A. B. (2 A & S)		Augusta, Ga.
Vincent, W. D. (2 T)	Orangeburg	Orangeburg
Wackyn, M. A. (2 E)	Richland	Columbia
Walker, W. A. (1 Ar.)	Pickens	Easley
Wall, J. E. (2 A & S)	Anderson	Anderson
Wallace, F. D. (1 Ar.)	Laurens	Laurens
Wallace, R. W. (3 A)	Laurens	Gray Court
Waller, P. F. W. (3 E)	Charleston	Meyers
Walsh, A. A. (3 E)	Greenville	Greenville
Wannamaker, T. R. (1 C)	Lexington	Swansea
Ware, M. D. (1 E)	Darlington	Darlington
Warner, H. D. (2 E)	Lexington	Lexington
Warr, E. L. (3 E)	Union	Jonesville

Warren, J. A. (4 ME)	Mount Vernon, N. Y.
Warren, J. O (1 PM)	Mount Vernon, N. Y.
Watson, E. C. (3 E)	Allendale
Watson, E. L. (1 A)	Edgefield
Watson, L. P. (S)	Saluda
Watson, S. C. (1 A & S)	Richland
Watson, S. P. (3 A)	Spartanburg
Watts, T. K. (1 A)	Kershaw
Webb, E. von. H. (2 A & S)	Anderson
Webb, J. A. (3 A)	Anderson
Webb, T. W. (2 A)	Aiken
Weeks, H. O. (1 A & S)	Aiken
Weigle, C. C. (4 A 7)	Anderson
Welborn, J. D. (1 E)	Pickens
Welborn, M. B. (3 A & S)	Anderson
Welch, E. V. (2 A)	Orangeburg
Welch, J. R. (1 E)	Richland
Welch, W. D. (2 CE)	Richland
Wells, C. M. (1 A & S)	Greenville
Wells, G. G. (S)	Greenville
Weil, J. H. (2 T)	Charleston
West, C. P. (4 A & S)	Greenville
West, W. (4 CE)	Spartanburg
West, W. P. (2 E)	Charleston
Whetsell, J. A. (4 A 1)	Orangeburg
Whetstone, G. B. (3 CE)	Orangeburg
Whilden, C. N. (4 CE)	Sumter
Whilden, J. E. (3 CE)	Sumter
White, A. H. (4 A & S)	Greenville
White, H. A. (3 A)	Marion
White, L. B. (3 CE)	Florence
White, L. M (3 CE)	York
White, R. B. (3 E)	Darlington
Whitlock, H. W. (1 Ar.)	Chester
Whitten, S. E. (2 E)	Anderson
Wickliffe, B. I. (1 P. M.)	Oconee
Wiggins, L. E. (2 CE)	Bamberg
Wiggins, R. C. (1 A)	Florence
Wilburn, W. C. (1 A)	Union
Wilder, A. B. (2 CE)	Sumter
Wilkes, F. J. (1 E)	Orangeburg
Williams, G. P. (3 A)	Marion
Williams, H. L. (2 A)	Hampton
Williams, H. T. (3 T)	York
Williams, J. A. (1 A)	Bamberg
Williams, J. C. (1 A)	Greenwood
Williams, J. F. (2 E)	Sumter
Williams, J. H. (1 E)	Hampton
Williams, M. L. (3 E)	Lexington
Williams, J. S. (3 E)	Aiken
Williams, T. L. (2 T)	York
Williams, W. L. (S)	York
Williamson, J. W. (4 A 4)	Dillon
Willimon, R. C. (1 A & S)	Greenville
Willis, J. C. (1 A)	Marlboro

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Wilson, B. S. (1 A)	Charleston	Martins Point
Wilson, C. D. (2 A)	Richland	Blythewood
Wilson, E. W. (1 A)	Richland	Blythewood
Wilson, G. V. (3 A)	Orangeburg	Bowman
Wilson, J. A. (1 C)		Roanoke, Ala.
Wilson, J. C. (2 A)	Oconee	Westminister
Wilson, J. U. (4 EE)		Villa Rica, Ga.
Wilson, V. L. (2 A & S)	Allendale	Fairfax
Wingard, B. F. (3 A)	Lexington	Lexington
Windham, E. L. (1 A)	Lee	Lamar
Wingo, D. L. (2 E)	Greenville	Greenville
Wise, C. T. (2 CE)		Augusta, Ga.
Wise, G. H. (1 A)	Saluda	Leesville
Witherspoon, J. H. (3 TE)	Lee	Mayesville
Witherspoon, M. B. (1 E)	Sumter	Sumter
Wood, J. F. (1 E)		Washington, D. C.
Wodham, H. D. (1 E)	Darlington	Timmons ville
Woodham, J. B. (2 E)	Lee	Bishopville
Woodruff, R. C. (1 E)	Greenville	Greenville
Woodward, H. E. (1 E)	Barnwell	Williston
Woodward, J. M. (1 E)		Lavonia, Ga.
Woodward, M. H. (3 CE)	Barnwell	Barnwell
Workman, C. R. (2 A)	Laurens	Goldville
Wray, W. J. (2 CE)	York	York
Wright, C. D. (2 E)	York	Rock Hill
Wright, J. S. (3 CE)	Spartanburg	Duncan
Wylie, A. P. (3 E)	York	Rock Hill
Yarborough, J. H. (1 A)	Chester	Lowrys
Yarborough, H. W. (4 A 7)	Fairfield	Jenkinsville
Yarbrough, R. W. (2 CE)	Spartanburg	Spartanburg
Yeargin, J. A. (1 E)	Laurens	Gray Court
Yon, J. H. (1 A)	Orangeburg	Orangeburg
Yongue, G. E. (1 E)	Pickens	Pickens
Young, C. A. (1 A)	Florence	Timmons ville
Young, E. G. (2 CE)	York	Rock Hill
Young, R. H. (1 E)		Atlanta, Ga.
Youngblood, J. E. (4 A 7)	Barnwell	Elko
Zeigler, M. G. (1 E)	Bamberg	Denmark
Zimmerman, C. G. (1 A & S)	Spartanburg	Woodruff
Zimmerman, J. C. (1 E)	Calhoun	Cameron

SUMMARIES

Geographic Distribution of Students—Session 1926-1927

By Counties in South Carolina

Abbeville	11	Hampton	16
Allendale	11	Horry	12
Aiken	19	Jasper	3
Anderson	129	Kershaw	10
Bamberg	24	Lancaster	14
Barnwell	11	Laurens	27
Beaufort	10	Lee	16
Berkeley	1	Lexington	26
Calhoun	8	Marion	20
Charleston	28	Marlboro	23
Cherokee	13	McCormick	7
Chester	15	Newberry	10
Chesterfield	6	Oconee	38
Clarendon	13	Orangeburg	40
Colleton	18	Pickens	58
Darlington	28	Richland	35
Dillon	5	Saluda	15
Dorchester	2	Spartanburg	74
Edgefield	6	Sumter	31
Fairfield	15	Union	17
Florence	43	Williamsburg	6
Georgetown	8	York	52
Greenville	74		
Greenwood	19	Total for South Carolin	1067

BY STATES

Alabama	2
District of Columbia	1
Florida	5
Georgia	29
Louisiana	3
New Jersey	1
North Carolina	20
New York	5
South Carolina	1067
Tennessee	3
Virginia	1
Total	1137

SUMMARY OF SUMMER SESSION 1926

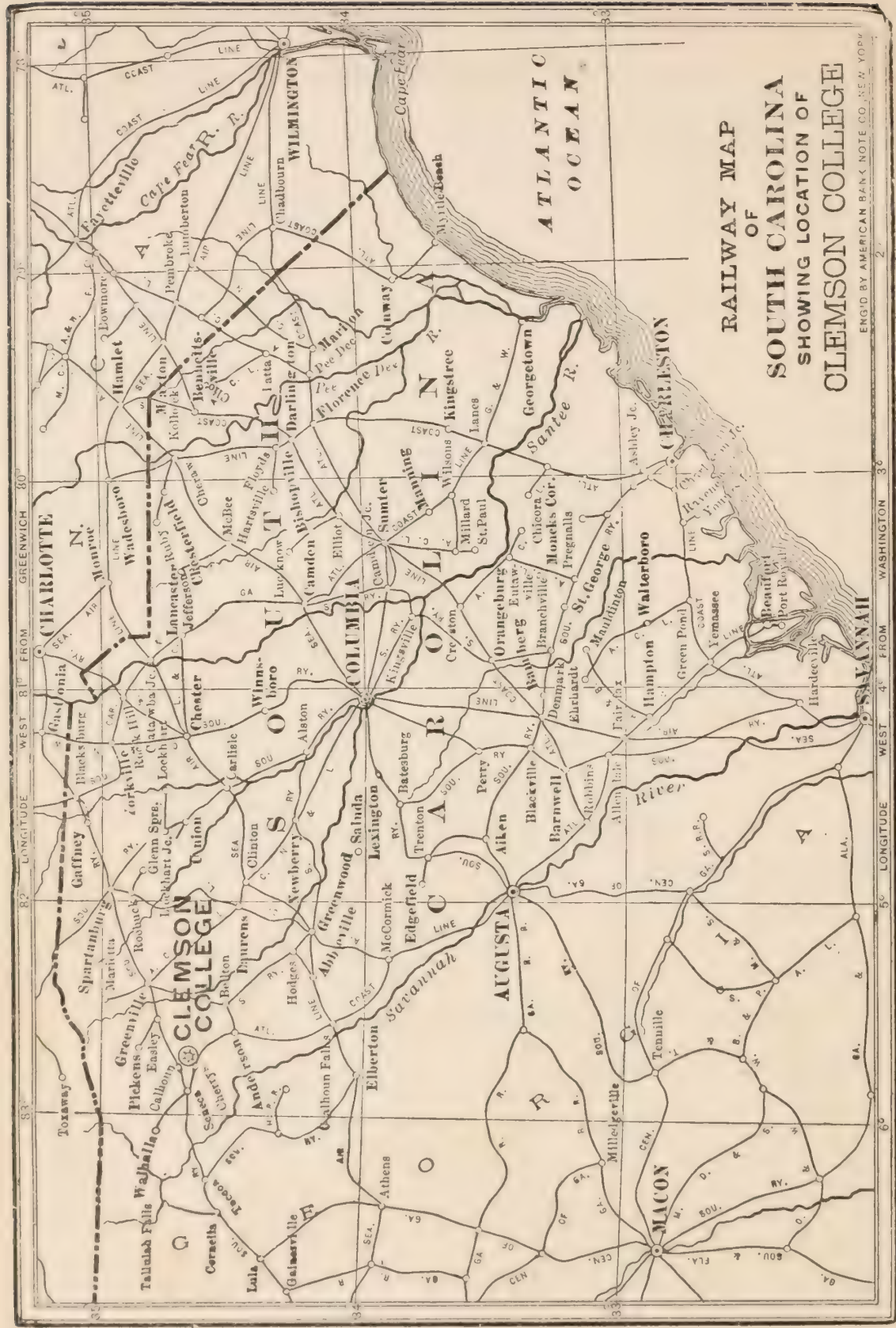
Teachers' Courses	19
College Make Up Courses	25
Cotton Grading	24
Total	68

Summary by Classes and Courses for the Regular Session

CLASS	Agriculture	Engineering Unclassified	Electrical Engineering	Mechanical Engineering	Civil Engineering	Textile Engineering	Chemistry	Arts and Science	Pre-Medical	Industrial Education	Architecture	TOTAL
Senior	58		29	11	24	8	1	13	0	7	7	158
Junior	83	59			38	11	2	12	0	10	13	228
Sophomore	87	77			42	31	7	16	1		13	274
Freshman	148	217					5	17	14			401
Special and Irregular	25	6	2	4	3	6	1	8	1			55
Two Year Agriculture	10											10
Two year Textile						10						10
TOTALS	411	359	31	15	107	66	16	66	16	17	33	1137

General Summary of Enrollment for 1926-1927

Regular College Session	1137
Summer Session	68
Total Enrollment	1205
Less individuals enrolled in both regular and summer sessions	25
Total individuals in attendance	1180



RAILWAY MAP
OF
SOUTH CAROLINA
SHOWING LOCATION OF
CLEMSON COLLEGE

ENG'D BY AMERICAN BANK NOTE CO. NEW YORK

83° LONGITUDE WEST 81° FROM GREENWICH 80°
82° LONGITUDE WEST 80° FROM GREENWICH 79°
81° LONGITUDE WEST 79° FROM GREENWICH 78°
80° LONGITUDE WEST 78° FROM GREENWICH 77°
79° LONGITUDE WEST 77° FROM GREENWICH 76°
78° LONGITUDE WEST 76° FROM GREENWICH 75°
77° LONGITUDE WEST 75° FROM GREENWICH 74°
76° LONGITUDE WEST 74° FROM GREENWICH 73°
75° LONGITUDE WEST 73° FROM GREENWICH 72°
74° LONGITUDE WEST 72° FROM GREENWICH 71°
73° LONGITUDE WEST 71° FROM GREENWICH 70°
72° LONGITUDE WEST 70° FROM GREENWICH 69°
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THE
CLEMSON
AGRICULTURAL
COLLEGE

RECORD
THIRTY-FIFTH YEAR

CATALOGUE
1927 - - 1928

ANNOUNCEMENTS 1928-1929

Published quarterly by the Clemson Agricultural College, Clemson College, S. C. Entered as second class matter April 25, 1905, at the Post Office at Clemson College, South Carolina, under the Act of July 16, 1894, now superseded by the Act of August 24, 1912.

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COLLEGE CALENDAR, SESSION 1928-29

1928

Entrance Examinations	September 3rd and 4th
Matriculation and Registration, new students	September 5th 8:00 A. M. to 6:00 P. M.
Freshman Week	September 5th, September 11th
Reexaminations, upper classmen	September 10th and 11th
Matriculation and Registration, upper classmen	September 12th 8:00 A. M. to 6:00 P. M.
First Chapel	September 13th
First semester begins	September 13th
Thanksgiving Day (holiday)	November 29th
Christmas Holidays begin	December 22nd

1929

College Work Resumed	January 4th
First Semester ends	January 26th
Second Semester begins	January 28th
Final Senior Examinations end	May 25th
Final College Examinations end	June 1st
Commencement Exercises begin	June 2nd
Graduating Exercises	June 4th
Scholarship examinations at county seats	July 12th

LOCATION

RAILROAD STATION :

Calhoun, S. C., on Southern Railway main line, one mile distant.

Cherrys, S. C., on Blue Ridge Railway, two miles distant.

STATE HIGHWAYS NOS. 2 AND 15.

POSTOFFICE AND TELEGRAPH :

Clemson College, S. C.

EXPRESS AND FREIGHT :

Calhoun, S. C.

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BOARD OF TRUSTEES

LIFE MEMBERS

ALAN JOHNSTONE, <i>President</i>		Newberry, Newberry County
J. E. WANNAMAKER	.....	St. Matthews, Calhoun County
W. W. BRADLEY	.....	Columbia, Richland County
R. I. MANNING	.....	Columbia, Richland County
A. F. LEVER	.....	Columbia, Richland County
B. E. GEER	.....	Greenville, Greenville County
PAUL SANDERS	.....	Ritter, Colleton County

TERM EXPIRES 1928

R. H. TIMMERMAN	.....	Batesburg, Lexington County
F. E. COPE	.....	Cope, Orangeburg County
W. D. BARNETTE	.....	Columbia, Richland County

TERM EXPIRES 1930

J. J. EVANS	.....	Bennettsville, Marlboro County
I. M. MAULDIN*	.....	Columbia, Richland County
R. M. COOPER	.....	Wisacky, Lee County

STANDING COMMITTEES OF BOARD

The President of the Board is ex officio a member of all committees

AGRICULTURAL: Wannamaker, *Chairman*; Lever, Manning, Cooper, Sanders. (This committee is also the Veterinary Committee, the Crop Pest Commission and the Experiment Station Board of Control.)

EXECUTIVE: Geer, *Chairman*; Barnette, Bradley, Evans.

FERTILIZER: Manning, *Chairman*; Evans, Wannamaker, Cope.

FINANCE: Geer, *Chairman*; Bradley, Manning, Timmerman, Cope.

STATED MEETINGS OF BOARD

3:00 P. M.—Third Friday in March

3:00 P. M.—Third Friday in June

3:00 P. M.—Third Friday in October

*Deceased.

BOARD OF VISITORS 1927

First District

CHARLTON DURANT Manning

Second District

R. B. CUNNINGHAM Allendale

Third District

J. C. SELF Greenwood

Fourth District

GEORGE NORWOOD, JR. Greenville

Fifth District

EDMUND MALLOY Cheraw

Sixth District

JOHN W. MOORE Florence

Seventh District

W. A. STUCKEY Bishopville

Stated meeting of Board of Visitors: First Wednesday in May.

OFFICERS OF ADMINISTRATION

ENOCH WALTER SIKES, PH. D., LL. D.
President

OTIS R. COLE, LIEUTENANT COLONEL, U. S. ARMY
Commandant, Director of Military Department

SAMUEL WILDS EVANS
Treasurer and Secretary of Board of Trustees

JAMES CORCORAN LITTLEJOHN, B. S.
Business Manager

LEE W. MILFORD, M. D.
Surgeon

WILLIAM HAROLD WASHINGTON, M. S.
Registrar

HENRY WALTER BARRE, M. A.
Director of Research, Experiment Station

RICHARD NEWMAN BRACKETT, PH. D.
Director of Chemistry Department

FRED HARVEY HALL, CALHOUN, PH. D.
Director of Resident Teaching, Agricultural Department

DAVID WISTAR DANIEL, A. M., LITT. D.
Director of Arts and Science Department

MARGUERITE VERITY DOGETT, A. B.
Librarian

SAMUEL BROADUS EARLE, A. M., M. E.
Director of Engineering Department

JAMES GILLIAM GEE, B. S.
Director of Athletics and Head of Department of Physical Education

DAVID HILL HENRY, B. S.
Secretary Board of Fertilizer Control

WILLIAM WILLIAMS LONG, B. S., LL. D.
Director of Extension Service

HORACE HAROLD WILLIS, B. S.
Director of Textile Department

FACULTY

WILLIAM BARRE AULL

Associate Professor of Bacteriology

B. S. Clemson Agricultural College 1907; Graduate work University of Virginia 1909-10, Iowa State College 1925, 1927

THOMAS LAWRENCE AYERS

Associate Professor of Agricultural Education

B. S. Clemson Agricultural College 1918; Graduate Work George Peabody College 1926, 1927

PAUL G. BALCAR

Assistant Professor of Military Science and Tactics

L.L. B. University of Iowa 1914; Graduate the Infantry School 1922

HENRY WALTER BARRE

Professor of Botany and Bacteriology

B. S. Clemson Agricultural College 1905; B. Sc. 1907, M. A. 1910, University of Nebraska

LEONARD ROWLAND BOOKER

Itinerant Teacher-Trainer and Assistant State Supervisor

B. S. Clemson Agricultural College 1925

RICHARD NEWMAN BRACKETT

Professor of Chemistry

A. B. Davidson College 1883; Ph. D. Johns Hopkins University 1887

MARK EDWARD BRADLEY

Professor of English

A. B. Erskine College 1898; Graduate Work University of Chicago 1904, 1910, University of North Carolina 1927

HARRINGTON COOPER BREARLEY

Professor of Economics and Sociology

A. B. 1916, M. A. 1917, University of South Carolina; Graduate Work University of North Carolina 1922-1924, Syracuse University 1926; Candidate for Ph. D. University of North Carolina 1928.

HUGH MONROE BROWN

Associate Professor of Physics

B. A. 1920, M. A. 1921, University of Denver; Ph. D. University of California, 1927

THOMAS STEPHEN BUIE

Professor of Agronomy and Head of Division

B. S. Clemson Agricultural College 1917; M. S. Iowa State College 1927; Candidate for Ph. D. Iowa State College, September, 1928

FRED HARVEY HALL CALHOUN
Professor of Geology and Mineralogy
B. S. 1898, Ph. D. 1902, University of Chicago

AURA M. CARKUFF
Assistant Professor of Agricultural Economics
B. S. 1925, M. S. 1927, Kansas State Agricultural College

EDWARD LEROY CARPENTER
Associate Professor of Mechanical Engineering
B. S. Rhode Island State College 1919

JULIUS LAFAYETTE CARSON, JR.
Assistant Professor Physical Education and Assistant Coach
B. S. Clemson Agricultural College 1914; Graduate Work University of Illinois, 1925

ROBERT JOSEPH CHEATHAM*
Associate Professor of Weaving and Design
B. S. Clemson Agricultural College 1916

ELWYN LORENZO CLARKE
Professor of Civil Engineering
B. S. University of Illinois 1902

JOSHUA CRITTINDEN CODY
Associate Professor of Physical Education and Head Coach
Vanderbilt University

OTIS R. COLE
Professor of Military Science and Tactics and Commandant of Cadets
Graduate School of the Line 1921; Graduate Command and General Staff School 1924

GILBEART HOOPER COLLINGS
Assistant Professor of Agronomy
B. A. Virginia Polytechnic Institute 1915; M. S. University of Illinois 1917; Ph. D.
Rutgers University 1925

WILL GILES CRANDALL
Professor of Education
B. S. Cornell University 1918

DAVID WISTAR DANIEL
Professor of English
A. B. Wofford College 1892; M. A. Vanderbilt University 1901; Graduate Work
University of Chicago 1899

*On leave, Cotton Technologist U. S. Department Agriculture.

FRANK TOWNES DARGAN

Professor of Electrical Engineering

B. S. and M. M. P. 1898, M. S. 1899, Furman University; Graduate Work University of Michigan and Cornell University; Courses General Electric and Westinghouse Companies.

CHARLES STEBBINS DOGETT

Professor Emeritus of Textile Chemistry and Dyeing

M. S. Clemson Agricultural College; Oberlin College; University of Leeds; University of Munich; Swiss Federal Polytechnic; Royal Prussian Polytechnic

IVY WILLIAM DUGGAN

Assistant Professor Agricultural Education

B. S. Clemson Agricultural College 1919

(In charge Agricultural Education Work at Seneca, S. C.)

DAVID DUNAVAN

Assistant Professor of Entomology and Zoology

B. S. Oregon Agricultural College 1925; Graduate Work Iowa State College 1926

SAMUEL BROADUS EARLE

Professor of Mechanical Engineering

A. B. 1898, A. M. 1899, Furman University; M. E. Cornell University 1902. Courses with General Electric Company

ROBERT KNIGHT EATON

Professor of Carding and Spinning

A. B. Bowdoin College 1905; Graduate Work Philadelphia Textile School

CLAYTON CARR EDWARDS

Assistant Professor of Mathematics

A. B. 1922, M. A. 1925, University of North Carolina

ROBERT OLIVER FEELEY

Professor of Veterinary Science

D. V. S. New York University 1906

BERNHARD EDWARD FERNOW

Professor of Mechanical Engineering

A. B. 1904, M. E. 1906, Cornell University

EDWIN JONES FREEMAN

Associate Professor of Machine Shop

B. S. Clemson Agricultural College 1922

CHARLES MANNING FURMAN

Professor Emeritus of English

A. B. Furman University 1859

JAMES GILLIAM GEE

Professor of Physical Education

B. S. Clemson Agricultural College 1917; Graduate Work Cornell University 1919-20; University of Florida 1925-27; Candidate for Ph. D. Cornell University, 1928.

HOWARD EMMITT GLENN

Assistant Professor of Civil Engineering

B. S. in C. E. 1922, C. E. 1927, University of Kentucky

WILLIAM EMERA GODFREY

Professor of Physics

A. B. 1893, A. M. 1898, Mercer University; Graduate Work University of Chicago and Cornell University

BEN EDMUND GOODALE

Associate Professor of Dairying

B. S. Iowa State College 1922

DAVID NIVIN HARRIS

Assistant Professor of Drawing

B. S. Clemson Agricultural College 1908

CHARLES ORVILLE HEATH

Associate Professor of History and Economics

B. S. 1916, M. S. 1917, Cornell University; Graduate Work University of Wisconsin; Ph. D. Clark University 1927

ALESTER GARDEN HOLMES

Professor of History

B. S. The Citadel 1897; Graduate Work University of Chicago 1911

JOSEPH EVERETT HUNTER

Associate Professor of Mathematics

B. S. Clemson Agricultural College 1896; Graduate Work University of Chicago 1902, 1904, 1906

WARD CHARLES JENSEN

Professor of Agricultural Economics, Acting Head of Division

B. S. University of California 1917; M. S. in Agriculture, Cornell University 1919; Ph. D. Wisconsin 1927

JAMES MASSIE JOHNSON

Associate Professor of Forge and Foundry

Miller School; Virginia Polytechnic Institute; Ohio State University

RICHARD W. JOHNSON

Assistant Professor of Military Science and Tactics

Graduate The Infantry School 1922

HOWARD DOHLA JOHNSTON

Assistant Professor of Military Science and Tactics

Graduate United States Military Academy 1918; Graduate The Infantry School 1920

BURR HARRISON JOHNSTONE

Assistant Professor of Mathematics

Newberry College; B. S. University of South Carolina; Graduate Work University of Chicago, Cornell University, University of Virginia

WILLISTON WIGHTMAN KLUGH

Associate Professor of Drawing

B. S. Clemson Agricultural College 1896; Graduate Work Vanderbilt University 1898; Cornell University 1900

JOSEPH PAUL LAMASTER

Professor of Dairying

B. S. University of Kentucky 1913; Candidate for M. S. in Agriculture, University of Kentucky, 1928

JOHN DEWEY LANE

Assistant Professor of English

A. B. Newberry College 1920; M. A. University of Virginia 1924; Columbia University 1923

RUDOLPH EDWARD LEE

Professor of Architecture

B. S. Clemson Agricultural College 1896; Graduate Work Cornell University; University of Pennsylvania; Zanerian Art School

CHARLES QUILLIAN LIFSEY

Assistant Professor Military Science and Tactics

Graduate United States Military Academy 1918; Graduate Army Signal School 1925

WILLIAM LEROY LIPPINCOTT

Professor of Chemistry

B. of Chem. 1918, Graduate Work 1920-21, Cornell University

JOHN THOMAS McALISTER

Associate Professor of Agricultural Engineering

B. S. Mississippi A. & M. College 1916; Graduate Work Iowa State College 1925

ARTHUR ERNEST McKENNA

Acting Associate Professor of Weaving and Design

Graduate Rhode Island School of Design 1922; Bradford-Durfee Textile School 1925

JOHN ERNEST McLEAN

Assistant Professor Agricultural Education

B. S. Alabama Polytechnic Institute 1924; Graduate Work Cornell University 1926
(In charge Agricultural Education Work Central, S. C.)

ARCHIE PAUL McLEOD

*Assistant Professor Physical Education and Assistant Coach
of Varsity Sports*

B. S. Furman University 1922

SAMUEL MANER MARTIN

Professor of Mathematics

B. S. The Citadel 1896; Graduate Work Cornell University 1900; Harvard University 1904; University of Chicago 1908

JOHN LOGAN MARSHALL

Associate Professor of Wood Work

Georgia School of Technology; B. S. Clemson Agricultural College 1909; Bradley Polytechnic Institute 1919

WILLIAM HAYNE MILLS

Professor of Rural Sociology

A. B. Davidson College 1892; B. D. Columbia Theological Seminary 1897

JACK HARRIS MITCHELL

Professor of Chemistry

B. S. 1903, M. S. 1904, Alabama Polytechnic Institute; M. S. University of Illinois 1911

CHARLES LEE MORGAN

Professor of Poultry Husbandry

B. S. University of Kentucky 1918; Graduate Work Iowa State College 1924;
Candidate for M. S. degree University of Kentucky 1928

CHARLES E. MULLIN

Professor Textile Chemistry and Dyeing

New York Electrical School 1909-10; Juniata College 1913; M. Sc., Philadelphia Textile School 1923-25

ALBERT MYERS MUSSER

Professor of Horticulture

Pennsylvania State College; B. S. A. University of Florida 1918

CHARLES CARTER NEWMAN

Professor of Horticulture

Alabama Polytechnic Institute; B. S. Clemson Agricultural College 1896

EARL OTTO

Assistant Professor of Chemistry

A. B. 1919, M. A. 1920, University of Cincinnati; Candidate for Ph. D. University of Cincinnati 1928

ARTHUR W. PENROSE

Assistant Professor of Military Science and Tactics

B. S. E. Temple University; Graduate The Infantry School 1925

VERD PETERSON

Consulting Professor of Agricultural Education

State Supervisor of Agricultural Education, Columbia, S. C.

FRANK H. POLLARD

Professor of Chemistry

B. of Chemistry 1916, Ph. D. 1922, Cornell University

ELIJAH HUGH RAWL

Acting Associate Professor of Horticulture

B. S. Clemson Agricultural College 1921; M. S. University of California 1923

SAM ROSEBOROUGH RHODES

Professor of Electrical Engineering

B. L. 1900, M. S. 1901, Furman University; B. S. Clemson Agricultural College 1907; Course General Electric Company, 1907-1909

ORESTES PEARL RHYNE

Professor of Modern Languages

A. B. Lenoir-Rhyne College 1907; A. B. 1908, A. M. 1909, University of North Carolina; Ph. D. Johns Hopkins University 1913

DUANE B. ROSENKRANS

Associate Professor of Botany

A. B. Upper Iowa University 1911; M. A. University of Wisconsin 1917

AUGUSTUS G. SHANKLIN

Professor of Mathematics

B. S. The Citadel 1893; Graduate Work Cornell University 1908; Columbia University 1911

FRANKLIN SHERMAN

Professor of Entomology and Zoology

B. S. Agriculture, Cornell University 1900; M. S. Maryland Agricultural College 1912

LAWRENCE VINCENT STARKEY

Professor of Animal Husbandry

B. S. University of Illinois 1914; M. S. University of Wisconsin 1917

JAMES ANNE STEVENSON

Assistant Professor of Civil Engineering

B. C. E. University of Arkansas 1925; M. S., Iowa State College 1927

HAROLD SIMMONS TATE

Assistant Professor of Industrial Education

B. S. Clemson Agricultural College 1925; Graduate Work Columbia University 1926;
George Peabody College 1927

RUPERT TAYLOR

Assistant Professor of English

A. B. 1903, A. M. 1906, University of Arkansas; Ph. D. Columbia University 1911

LEROY TUCKER

Professor of Mechanics

A. B. Washburn College 1912; B. S. in Railway C. E., University of Illinois 1923

CLEMSON M. WILSON

Consulting Professor of Industrial Education

State Supervisor of Industrial Education, Columbia, S. C.

INSTRUCTORS

EUGENE FRANKLIN CARTEE

Weaving and Design

B. S. Clemson Agricultural College 1925

JOHN ESTEN DAVENPORT

Chemistry

A. B. 1926, M. A. 1927, University of North Carolina

BOYCE DEWITT EZELL

Horticulture

B. S. Clemson Agricultural College 1924; M. S. Michigan State College 1926

JOHN ANTHONY HARTELL

Drawing

B. Arch. Cornell University 1925. Royal Academy of Fine Arts, Stockholm, 1926

WYLIE FORT DUPRE HODGE

Drawing

Clemson Agricultural College; New York School of Fine and Applied Arts, 1915-16;
1920-21

ERRATA

Page 16. Mr. Rupert Taylor is shown as Assistant Professor of English, whereas, he should be shown as Associate Professor of English.

Page 17. To be added to Instructors:

HENRY RANKIN, JR.

Instructor in English

A. B., 1922, A. M., 1927, University of North Carolina

FRANCIS MARION KINARD

English

A. B. Wofford College 1923; Graduate Work University of South Carolina 1926,
University of North Carolina 1927

ROWLAND LINWOOD LEE, JR.

Textiles

B. S. Clemson Agricultural College 1925; Georgia School of Technology

JOHN DIEHL McCLUER

Chemistry

B. S. Davidson College 1924; M. S. University of North Carolina 1927

FRERE RAWLINSON

Physics

Furman University; B. S. University of South Carolina 1926; Graduate Work
University of South Carolina 1927

ALBERT RAYMOND REED

Physics

A. B. Wofford College 1925

MYRON ARTHUR RICE

Botany

B. S. University of California 1916; M. S. in Agriculture, Cornell University 1925

ROBERT RUSSELL RITCHIE

Animal Husbandry

B. S. Iowa State College 1926

JAMES HAGOOD SAMS

Engineering

B. S. Clemson Agricultural College 1924; E. E. Cornell University 1926

ROLAND KARL SCHUHOLZ

Architecture

College City of Detroit; B. S. in Arch., University of Michigan, 1927

JOHN TOWNSEND

Music

Davidson College; Institute of Musical Art

ROBERT L. WALLIS

Zoology and Entomology

B. S. Colorado Agricultural College 1927

WALTER BACHUS WILSON

Engineering

General Electric Engineering School; Graduate Lowell Institute of M. I. T., 1922

OTHER OFFICERS

MARGARET LEE SADLER

Secretary to the President

JEAN BEVERLY SLOAN

Assistant to the Registrar

VIRGINIA EARLE SHANKLIN

Assistant to the Registrar

CORNELIA AYER GRAHAM

Assistant Librarian

MARY PASCO CONRAD, A. B.

Assistant Librarian

FRANCES WHITMIRE EARLE, A. B.

Assistant Librarian

EDWARD BERNARD ELMORE

Bookkeeper

BOYCE B. BURLEY

Assistant Bookkeeper

MRS. REBECCA CALHOUN SHIVER

Clerk

MARIE WHITE, R. N.

Head Nurse

MYRTLE DEAN

X-Ray and Laboratory Technician

EUGENE GRIER PARKER, B. S.

Alumni Secretary

CHARLES CARTER NEWMAN, B. S.

Superintendent of Campus and Roads

JOSEPH H. HEWER

Superintendent of Construction and Repairs

JAMES DOUGLAS HARCOMBE

Mess Officer

PRESTON BROOKS HOLTZENDORFF, JR., LL. B.
General Secretary, Y. M. C. A.

THEO L. VAUGHAN, B. S.
Associate Secretary Y. M. C. A.

JOHN ROY COOPER, B. S.
Assistant Secretary Y. M. C. A.

REV. W. H. BRYANT, B. S.
Pastor Baptist Church

REV. CAPERS SATTERLEE, B. D.
Rector Episcopal Church

REV. SYDNEY J. L. CROUCH, B. D.
Pastor Presbyterian Church

REV. GEORGE H. HODGES, A. B.
Pastor Methodist Church

FERTILIZER INSPECTION AND ANALYSIS

RICHARD NEWMAN BRACKETT, A. B., PH. D.
Chief Chemist

DAVID HILL HENRY, B. S.
Secretary Board of Fertilizer Control

BENJAMIN F. ROBERTSON, B. S.
Chemist (Fertilizer Analysis)

JOHN TREUTLEN FOY, B. S.
Assistant Chemist (Fertilizer Analysis)

BENJAMIN FREEMAN, B. S.
Assistant Chemist (Fertilizer and Miscellaneous Analysis)

DONALD B. RODERICK
Assistant Chemist (Miscellaneous Analysis)

STANDING COMMITTEES OF THE FACULTY

1927-28

The President is ex officio a member of all committees

ATHLETICS:

Gee, *Chairman*; Goodale, Milford, Tucker, Washington.

CATALOGUE:

President Sikes, *Chairman*; Littlejohn, Washington, Miss Sadler.

CHAPEL MUSIC:

Townsend, *Chairman*; Carpenter, Lippincott.

CURRICULUM:

(Special)

DAY AND SPECIAL STUDENTS:

Washington, *Chairman*; Cole, Henry, Littlejohn.

ENTRANCE REQUIREMENTS:

Daniel, *Chairman*; Calhoun, Holmes, Martin, Washington.

FACULTY PROGRAM:

Aull, *Chairman*; Rhyne, Jensen, Tucker, Gee, Rice.

IRREGULAR STUDENTS:

Hunter, *Chairman*; Aull, Bradley, Klugh, Pollard.

LIBRARY:

Miss Doggett, *Chairman*; Ayers, Brearley, Calhoun, Crouch, Dargan, Lane.

REEXAMINATION AND PROMOTION:

Washington, *Chairman*; Calhoun, Daniel, Dargan, Earle, Kinard, Martin, Tate.

SCHEDULE:

Washington, *Chairman*; Aull, Kinard, Lippincott, Penrose, Rhodes, Eaton.

SECONDARY SCHOOLS RELATIONS:

Washington, *Chairman*; Buie, Duggan, Gee, Hunter, Kinard, Pollard, Rawlinson, Miss Doggett.

STUDENT LOANS:

Henry, *Chairman*; Evans, Littlejohn.

STUDENT ORGANIZATIONS:

Henry, *Chairman*; Eaton, Calhoun, Freeman.

STUDENT PETITIONS:

Washington, *Chairman*; Henry, Martin, Rhodes, Tucker.

STUDENT PUBLICATIONS:

Lane, *Chairman*; Henry, Kinard, Littlejohn, Rankin, Washington.

SUMMER SCHOOL:

Calhoun, *Chairman*; Crandall, Daniel, Henry, Klugh, Willis, Washington.

TEXT BOOK:

Shanklin, *Chairman*; Collings, Harris, Johnstone, Mitchell.

UNIFORM:

Cole, *Chairman*; Eaton, Evans.

VISITORS:

Miss Sadler, *Chairman*; Cole, Henry, Littlejohn, Washington.

AGRICULTURAL EXPERIMENT STATION STAFF

- H. W. BARRE, B. S., A. M., *Botanist and Director.*
G. H. AULL, B. S., *Assistant Director*
G. M. ARMSTRONG, PH. D., *Head of Division of Boll Weevil Control.*
Florence, S. C.
W. B. ALBERT, PH. D., *Assistant Plant Physiologist,* Florence, S. C.
W. B. AULL, B. S., *Associate Bacteriologist.*
J. A. BERLY, B. S., *Assistant State Entomologist†.*
R. N. BRACKETT, PH. D., *Chemist.*
A. B. BRYAN, B. S., B. LITT., *Agricultural Editor.*
T. S. BUIE, B. S., M. S., *Agronomist.*
A. M. CARKUFF, M. S., *Assistant Agricultural Economist.*
O. L. CARTWRIGHT, M. S., *Assistant Entomologist.*
R. E. CURRIN, *Supt. of Pee Dee Experiment Station,* Florence, S. C.
E. W. DUNNAM, M. S., *Assistant Entomologist, Boll Weevil Control,**
Florence, S. C.
C. O. EDDY, M. S., *Associate Entomologist.*
R. O. FEELEY, D. V. S., *Consulting Veterinarian.*
L. M. FENNER, M. S., *Assistant Pathologist.†*
F. A. FENTON, PH. D., *Entomologist Boll Weevil Control,** Florence,
S. C.
MARY E. FRAYSER, M. A., *Research Specialist in Home Economics.*
BURNS GILLISON, *Foreman Experiment Station Farm.*
E. G. GODBEY, B. S., *Associate Animal Husbandman.*
E. E. HALL, M. S., *Agronomist Boll Weevil Control,* Florence, S. C.
W. T. HENERY, B. S., *Assistant Entomologist.*
W. C. JENSEN, M. S., *Acting Agricultural Economist.*
E. D. KYZER, B. S., *Supt. Coast Experiment Station,* Summerville, S. C.
J. P. LaMASTER, B. S. AGR., *Dairyman.*
C. A. LUDWIG, PH. D., *Associate Botanist and Plant Pathologist.*
W. H. MILLS, A. B., B. D., *Specialist in Agricultural Economics.*
J. H. MITCHELL, M. S., *Chemist.*
A. H. MEYER, PH. D., *Associate Agronomist.*
C. L. MORGAN, B. S., *Poultryman.*
K. S. MORROW, M. S., *Associate Dairyman.*
A. M. MUSSER, B. S., *Acting Horticulturist.*
C. S. PATRICK, B. S., *Head Farms Division.*
J. A. RILEY, M. S., *Supt. of Sand Hill Station,* Pontiac, S. C.
E. H. RAWL, M. S., *Acting Associate Horticulturist.*
W. B. ROGERS, B. S., *Assistant Agronomist.*
B. A. RUSSELL, B. S., *Assistant Agricultural Economist.*
FRANKLIN SHERMAN, M. S., *Entomologist.*
L. V. STARKEY, M. S., *Animal Husbandman.*
J. D. WARNER, M. S., *Assistant Agronomist.*

*Detailed by United States Department of Agriculture.

†South Carolina State Crop Pest Commission.

AGRICULTURAL EXTENSION STAFF

- W. W. LONG, B. S., LL. D., *Director Extension.*
D. W. WATKINS, B. S., *Assistant Director.*
A. B. BRYAN, B. S., B. Litt., *Agricultural Editor.*
T. S. BUIE, M. S., *Chief Agronomy Division, Soil Fertility Specialist.*
J. L. CARBERY, *Extension Agronomist (Plant Breeding), Spartanburg, S. C.*
J. R. DETHERAGE, *Assistant Agricultural Editor.*
A. L. DURANT, B. S., *Extension Livestock Specialist, Spartanburg, S. C.*
R. W. HAMILTON, B. S., *Soil Fertility Specialist.*
J. R. HAWKINS, M. S., *Livestock Agent, Florence, S. C.*
S. L. JEFFORDS, *Extension Agronomist, Spartanburg, S. C.*
W. J. KEEGAN, B. S., *Extension Agent in Dairying, Florence, S. C.*
J. P. LAMASTER, B. S., *Chief Dairy Division.*
I. D. LEWIS, B. S., *Agent Boys' Club Work.*
L. H. LEWIS, *Extension Agent in Marketing, Florence, S. C.*
C. L. MORGAN, B. S., *Chief Poultry Division.*
A. M. MUSSER, B. S., *Acting Chief Horticultural Division.*
C. A. OWENS, B. S., *Specialist in Packing and Grading, Spartanburg, S. C.*
J. O. PEPPER, B. S., M. S., *Extension Entomologist.*
E. S. PREVOST, *Bee Keeping Specialist.*
GEO. E. PRINCE, B. S., *Agent in Marketing, Aiken, S. C.*
FRANKLIN SHERMAN, M. S., *Chief Division of Entomology.*
A. E. SCHILLETTER, B. S., *Extension Horticulturist.*
L. V. STARKEY, M. S., *Chief Animal Husbandry Division.*
R. E. WATERS, B. S., *Extension Agent in Dairying, Spartanburg, S. C.*
B. O. WILLIAMS, B. S., *Agent Boys' Club Work.*

Staff located at Clemson College except where another address is given

DISTRICT AGENTS

A. A. McKeown	First District	Spartanburg, S. C.
J. T. Lazar	Second District	Florence, S. C.
A. H. Ward	Third District	Aiken, S. C.

COUNTY AGENTS

<i>Name</i>	<i>County</i>	<i>Post Office</i>
.....	Allendale	Allendale
Z. D. Robertson	Abbeville	Abbeville
C. Lee Gowan	Aiken	Aiken
S. M. Byars	Anderson	Anderson
.....	Bamberg	Bamberg
H. G. Boylston	Barnwell	Blackville
.....	Beaufort	Beaufort
C. L. McCaslan	Calhoun	St. Matthews
J. H. Harvey	Berkeley	Pinopolis
G. C. McDermid	Charleston	Charleston
Ralph Coarsey	Chester	Chester
W. J. Tiller	Chesterfield	Chesterfield
S. C. Stribling	Cherokee	Gaffney
F. M. Rast	Clarendon	Manning
.....	Colleton	Walterboro
J. M. Napier	Darlington	Darlington
S. W. Epps	Dillon	Dillon
T. M. Cathcart	Dorchester	St. George
W. H. Barton	Edgefield	Edgefield
R. H. Lemmon	Fairfield	Winnsboro
J. W. McLendon	Florence	Florence
M. M. McCord	Georgetown	Georgetown
W. R. Gray	Greenville	Greenville
E. L. Rogers	Greenwood	Greenwood
T. M. Evans	Horry	Conway
J. K. Dorman	Hampton	Hampton
J. P. Graham	Jasper	Ridgeland
J. W. Sanders	Kershaw	Camden
W. F. Howell	Lancaster	Lancaster
C. B. Cannon	Laurens	Laurens
.....	Lee	Bishopville
C. S. Addy	Lexington	Lexington
W. R. Wells, Jr.	Marion	Marion
W. D. Wood	Marlboro	Bennettsville
T. M. Morgan	McCormick	McCormick
T. M. Mills	Newberry	Prosperity
G. H. Griffin	Oconee	Walhalla
R. F. Kolb	Orangeburg	Orangeburg
T. A. Bowen	Pickens	Pickens
J. R. Clark	Richland	Columbia
J. M. Eleazer	Sumter	Sumter
Claude Rothell	Saluda	Saluda
Ernest Carnes	Spartanburg	Spartanburg
A. M. Vick	Union	Union
L. S. Carter	Williamsburg	Kingstree
L. W. Johnson	York	Sharon

LIVESTOCK SANITARY WORK STAFF COLUMBIA, S. C.

W. K. LEWIS, V. S., M. D. V., *State Veterinarian and Director*

R. A. MAYS, *Laboratory Veterinarian*

H. D. BRADSHAW, *Assistant Laboratory Veterinarian*

ASSISTANT STATE VETERINARIANS

M. L. BOYD

E. T. FISHER

H. B. HOOD

W. D. McCORMACK

F. K. PETERSON

G. C. WALDING

S. M. WITHERSPOON, JR.

CARLOS HELMS

JACK SCOTT

PART II.—ADMISSION; EXPENSES; RULES REGARDING PROMOTION, ETC.

REQUIREMENTS FOR ADMISSION

All applicants for admission to Clemson College must be at least sixteen years of age and at the time of entrance must be free from contagious or infectious disease. A certificate of good moral character and honorable discharge from the last school attended is required.

Students desiring to enter Clemson should apply to the Registrar for application blanks, and these properly filled out, should be returned to him as soon as possible, as late applicants may be crowded out. No student's matriculation will be complete until he has met all entrance requirements.

Students upon arrival at the College at the opening of the session must report at once to the Registrar's office and matriculate before being assigned to rooms in the barracks. No student will be admitted to any classes or examinations before matriculation and payment of fees. Matriculation is equivalent to a pledge to conform to the rules of the institution.

Admission to the College may be gained in one of the following ways:

1. *On Certificate From an Accredited High School.* Graduates from a high school who present a certificate showing the completion of fifteen standard high school units as explained below will be admitted to the freshman class without examination. The applicant must submit to the Registrar a transcript of his high school record showing the subjects taken each year, the length of the class periods, number of weeks each subject was taken, number of hours per week and the grade on each subject. This blank will be furnished by the Registrar on request. It must be signed by the principal and sent to the Registrar after the applicant has completed his high school course. This part of the application should be sent direct by the principal or superintendent. The schools which are recognized as diploma high

schools by the State Department of Education of South Carolina are regarded as accredited high schools for admission to Clemson. Applicants who are graduates of high schools outside of South Carolina will be accepted if they present certificates showing that they are graduates of a high school accredited by the Association of Colleges and Secondary Schools of the Southern States or from high schools which are accredited by their state university.

2. *By Examination.* Students applying for admission who do not present such certificates as are described above are required to stand the entrance examinations. For date of these examinations see the college calendar on page 3.

3. *By Examination and Certificate.* Applicants who are not graduates of accredited high schools and who can give acceptable documentary evidence of having completed the equivalent of fifteen units of work under formal instruction will be required to take examinations on English, mathematics, history and one other subject selected by the Registrar. If they pass these examinations the other units presented will be accepted and they will be considered as having met the entrance requirements and their other units will be validated. All other applicants will be required to take the entrance examinations for the full fifteen units.

Of the units listed below when presented for admission to the freshman class at least three units must be in English, two and a half in mathematics, and two in history. The remaining seven and a half units may be selected from any of the subjects listed below with the conditions noted. The scope of the examination is in keeping with the state high school curriculum.

HIGH SCHOOL SUBJECTS ACCEPTED FOR ADMISSION TO
THE FRESHMAN CLASS*English*

Grammar (High School text completed)	1
Composition and Literature...	3

History

Ancient (full course)	1
Ancient (short course)	$\frac{1}{2}$
Community Civics (half year)	$\frac{1}{2}$
Modern History	1
American History and Government, or Civics	1

*Modern Languages**

French	2
Spanish	2
German	2

Laboratory Sciences

General Science	1
Biology	1
Chemistry	1
Physics	1
Physical or High School Geography	1

Mathematics

Arithmetic	$\frac{1}{2}$
Algebra, to quadratics	1
Algebra, through quadratics...	$1\frac{1}{2}$
Algebra, through progressions and binomial theorem	2
Plane Geometry	1
Solid Geometry	$\frac{1}{2}$
Trigonometry	$\frac{1}{2}$

*Latin***

Beginners' or First Year and Caesar, 4 books	2
Cicero, 6 orations	1
Virgil, 6 books	1

Vocational Subjects

Agriculture	1 to 4
Bookkeeping	1
Manual Training	1 to 2
Stenography and Typewriting	1 to 3
Textile	1 to 2

*Credit depends upon the time devoted to the subject and the quantity of work accomplished. No credit is allowed for less than 72 weeks' work in Modern Languages.

**No credit is given for 36 weeks' work in Beginners' or First Year Latin.

Scholarship Examinations. Scholarship examinations are held by each county superintendent of education on the second Friday in July. These examinations will cover English, mathematics (algebra and geometry), history and agriculture. Applicants who wish to compete for scholarships and applicants who are not graduates from accredited high schools should take these examinations. If the applicant finds through these examinations that he is unprepared to enter college, he will be saved the expense of a trip to the College in September.

Entrance Examinations. Entrance examinations are given at the College Administration Building on Monday and Tuesday preceding the opening of the session.

Applicants expecting to gain admission by taking entrance examinations should be present and prepared to take these examinations as scheduled. Examinations can be given at other times only with the permission of the President, and upon the payment of a fee of \$2.00.

Admission to Advanced Standing. Work that has been taken in other colleges will be credited for an equivalent amount of work so far as it applies to any course offered in the College. The applicant must present: (a) a letter of honorable dismissal from the institution last attended, and (b) an official transcript of his record, including entrance credits. College credits given by transfer are provisional and may be cancelled at any time if the student's work is unsatisfactory. A student coming from another institution must spend at least one regular session in the College before he is eligible to apply for a degree. College credit may be given a graduate of an accredited secondary school by examination only.

Admission of Special Students. A limited number of persons properly recommended and over twenty-one years of age may be admitted as special students with the opportunity of pursuing special lines of study or investigation in any of the subjects taught in the College provided they can show evidence of seriousness of purpose. To be admitted as a special student a person must be recommended by the local superintendent of schools or by a responsible person from the industry or line of work which represents the special work he wishes to take in college. Each case must be passed on individually and approved by the President. Special students are not permitted to live in barracks but are subject to the general regulations of the College requiring regular attendance, excellent conduct and diligent work. Degrees are not given special students but a certificate of proficiency will be given when the work completed is deemed worthy.

Registration. A definite time is specified for registration, and all students are required to conform to the schedule. An additional fee of \$2.00 will be charged of any student failing in this requirement. (See dates for registration on college calendar,

page 3.) No student who has not paid all dues and fees will be admitted to classes.

Full instructions regarding registration will be furnished by the Registrar.

EXPENSES

Settlement of College Fees. College remittances should be made in cash, by money order, New York Exchange, or by local check, made payable to S. W. Evans, Treasurer. All required fees must be paid before a student can be assigned to a room in the barracks or permitted to begin work.

Juniors and seniors who have the permission of the President may secure board or board and room in the community. Meals may be had at the Clemson Hotel, Y. M. C. A. Cafeteria, The Coffee Shoppe, or at private homes. Room and board cost \$30 to \$35 per month; meals alone about \$25 per month. The rooming place of every such student must be approved by the President. Lists of available rooms may be secured by addressing the Registrar.

The fees and living expenses will be approximately as listed below. A leaflet giving the exact cost, including uniforms, will be mailed to the parents of all applicants prior to the opening of college in September. The cost of books, which varies with the class and course, is not included in the figures given below:

LIVING EXPENSES

Board at \$18.50 a month -----	\$166.50
Laundry at \$1.50 a month -----	13.50
Heat, light and water at \$2.10 a month -----	18.90
Total Living Expenses -----	\$198.90

FEES

Student Activity Fee -----	\$ 16.00
Incidental Fee -----	9.00
Laboratory Fee -----	2.25
Breakage Fee -----	3.00
Hospital Fee -----	11.25
Matriculation Fee -----	3.00

Total for All Required Fees -----	44.50
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Total Living Expenses and Required Fees	\$243.40
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Tuition for resident students who pay, add \$40.00.

Non-resident students pay \$80.00 tuition.

These figures do not include the cost of uniforms. See information in paragraph headed "Uniforms".

Note: The above expenses are for regular cadets who live in the dormitories. This expense will vary with "Day Cadets," "Day Students," and "Special Students". The following statements regarding the above groups of students will give approximately the amounts that must be paid to the College. The student himself must govern the cost involved by living out of the barracks.

A "Regular Cadet" is a member of the corps and rooms in barracks.

A "Day Cadet" is a member of the corps but rooms outside of barracks.

A "Day Student" is one who is taking regular classes and who may be a candidate for a degree, but who is not a member of the corps. He is required to attend all classes and chapel exercises; his place of rooming must be approved by the President.

He must at all times maintain a class standing of "C" or above on seventy percent of all his work on both daily and semester grades, measured in terms of semester credits. His conduct must at all times be above reproach. Should he fail to

meet these requirements in any detail, he may at the discretion of the President become a day cadet, or a regular cadet with no choice of rooms in barracks, or he may be required to withdraw from college. His entire record will be kept in the Registrar's office.

A day student will at no time be allowed to wear any part of the college uniform.

A "Special Student" is a mature person of serious purpose who is permitted to pursue a special subject for which he is especially qualified. His entire record will be kept in the Registrar's office.

All payments are to be made quarterly in advance as follows:

<i>Payable on</i>	<i>With Tuition</i>	<i>With Free Tuition</i>	<i>With Scholarship</i>
Entrance -----	\$75.35	\$65.35	\$40.35
Nov. 10, 1928 -----	69.35	59.35	34.35
Jan. 26, 1929 -----	69.35	59.35	34.35
Mar. 23, 1929 -----	69.35	59.35	34.35
Totals -----	\$283.40	\$243.40	\$143.04

Note: The President may require a cadet to withdraw from college if after due and reasonable notice his dues are not paid.

Uniforms. All students are required to wear the regulation uniform of the College. The cost of the uniform garments needed by a student must be deposited with the Treasurer of the College at matriculation in September. The uniforms are made to individual measure and are purchased on the most favorable contract obtainable from a reputable manufacturer. The uniforms are the property of the student. The College merely acts as agent for the student and makes no charge or profit for handling. In addition to the ordinary high top black shoes, each cadet will be required to have one pair of tan shoes, army style.

Students should provide themselves with a blue overall suit, or other protective covering for use in shops and laboratories.

If a student takes proper care of his uniforms and certain garments are serviceable for a second year, he will not be required to purchase a complete new outfit. The cost, therefore, to old students may be considerably reduced.

Any uniform allowances made to R. O. T. C. students by the Federal Government will be credited to the individual when the full amount of the commutation is received by the College.

Medical Fee. The medical fee paid by each student is intended to cover all ordinary cases of sickness and the treatment and medicines necessary. It is not intended to cover fees of doctors or specialists called into consultation, for performing operations, for special nurses, or for any medical or surgical attentions performed away from the College. Such expenses must be borne by the parent. The right of the College Surgeon, with the approval of the President of the College, to incur in behalf of any student under his care any of these extra services is hereby expressly reserved.

Student Activity Fee. This fee entitles a student to admission to all lyceum entertainments, athletic games, privileges of the Y. M. C. A. Building, and subscription to the student publications, *The Tiger*, *The Chronicle*, and *Taps*.

Breakage. The breakage fee of \$3.00 is a deposit to cover damages or destruction of college property when individual responsibility cannot be located. A student will be required to pay directly to the Treasurer for any damage done to college property for which he is personally responsible. The occupants of a room will be held responsible for any damage to property in the room.

Tuition. Tuition is \$40.00 per session, payable quarterly. Free tuition is granted to residents of South Carolina unable to pay the same, provided they comply with the State laws. All applicants for free tuition must file with the College the prescribed application to the State Board of Public Welfare. This blank will be sent to all applicants by August 15th, and must be returned properly filled in before the opening of college.

Immediately after the opening of college, the application is forwarded to the State Board of Public Welfare, which Board is required by law to investigate the financial standing of the parents or guardian, or the applicant himself, if he is of age. This Board reports its findings, together with its recommendations, to the Clemson College Board of Trustees, who may revoke or confirm the recommendations.

Any person required to pay tuition may appeal to the State Board of Education as provided by law.

Applicants filing the prescribed form will be granted free tuition pending investigation by the State Board of Public Welfare and action by the Board of Trustees. Applicants for free tuition will be notified of the results of the investigation about the first of January.

Non-resident students pay \$80.00 tuition.

Refunds to Students. Refunds will be made to students under the following rules:

1. A refund for uniforms will not be guaranteed to students who withdraw from the College after the uniforms have been ordered. If order cannot be cancelled the uniforms will be sent to the cadet upon receipt of the same.

2. A refund for living expenses will be made at the rates charged, but no refund will be made for interruptions of less than two weeks or in cases of discharge issued less than two weeks from the end of the current quarter.

3. No fees will be refunded.

4. A refund of *all* moneys, except the matriculation fee of \$3.00 and \$1.00 per day for board, etc., will be made to a student who leaves college within ten days of the date of his matriculation; provided, however that the refund for uniform cannot be guaranteed if the same has been ordered.

5. The College will not be liable for articles lost or stolen in the barracks.

6. The College will not be liable for lost or damaged

laundry, unless reported within two days after the date upon which laundry was due to be delivered, and then not more than the actual depreciated value of such articles as have been lost or damaged.

Books and Supplies. The L. C. Martin Drug Co., Inc., conducts a store near the campus and maintains a book and supply store where students may purchase text books, drawing instruments, and other student supplies. A complete list of the text books used in each course with the price of same will be furnished on application.

Each student will be required to own his text books and necessary equipment, except in the case of brothers in the same class who occupy the same room. All cadets shall submit their text books and other equipment for inspection at such times as are ordered.

Optional Expenses. It is not possible to give an estimate of a cadet's expenditures for such amusements as dancing, moving pictures, etc. This depends largely upon the disposition of the young man. The College endeavors to reduce to a minimum the temptation to spend money needlessly, but the authorities cannot be responsible for a cadet's private expenditures. This must be a matter between him and his parents.

Student Aids. There are few opportunities for students to earn money at Clemson by working in their spare time. In an agricultural and mechanical college most of the student's time when he is not in class room is occupied in laboratories, shops and fields. About forty young men secure positions as waiters in the messhall, for which service they are paid at the rate of eight dollars a month. In addition to this help, membership in the Reserve Officers Training Corps entitles freshmen and sophomores to a small commutation on uniforms. Juniors and seniors receive also a ration commutation.

Agricultural and Textile Scholarships: The General Assembly of South Carolina has provided for 223 scholarships for students taking agriculture and textiles. They are distributed among the counties according to the number of representatives.

They are worth one hundred and forty dollars each. Appointments to scholarships are made by the State Board of Education. The scholarships are available to needy and worthy students in the departments of agriculture and textiles. To secure a scholarship it is necessary to stand an examination held in each county on the second Friday in July. For rules and regulations pertaining to scholarships, write to the Registrar of Clemson College.

LOAN FUNDS

The Harmon Foundation. The Harmon Foundation of New York City has appropriated funds to assist juniors and seniors who are dependent wholly or in part on their own labor.

The William Wilson Finley Loan Fund. The sum of \$1,000 has been deposited with the College to be used as a loan fund to students living in counties traversed by the Southern Railway or the Blue Ridge Railway.

The George Cherry Foundation. Mrs. Mary Cherry Doyle has donated \$1,000 to aid worthy and needy students from Oconee County and that part of Anderson County including Pendleton. This fund is not available for first year students.

The U. D. C. Loan Fund. The John C. Calhoun Chapter of the U. D. C. has created a fund of \$500.00 to be loaned to lineal descendants of Confederate veterans. This fund is limited to juniors and seniors.

For information in regard to these funds, write Prof. D. H. Henry, Clemson College, S. C.

MEDALS AND HONORS

Trustees' Medal. The Board of Trustees has established a gold medal to be awarded annually to the best speaker among the representatives of the literary societies at Commencement. These representatives are chosen by judges selected by the societies at the annual public exercises in Memorial Hall. The medal is awarded by judges selected by the faculty. The medal was won in 1927 by Cadet F. B. Farr of Georgia.

Norris Medal. The following is from the will of Hon. D. K. Norris, a life trustee of Clemson, who died in 1905:

"I give \$500 face value, Norris Cotton Mill stock, to the Trustees of Clemson Agricultural College of South Carolina, on condition the dividend thereon shall be applied annually to the purchase of a gold medal, to be known as the 'Norris Medal', to be awarded to the student of Clemson meriting the same at graduation, under such rules and conditions as may be prescribed by the said Board of Trustees, and which medal shall have engraved on it 'Honos habet onus' (Honor brings responsibility)."

In 1927 the medal was awarded to Cadet W. C. Maxwell of Rydal, Ga.

R. W. Simpson Medal. A medal designated as the "R. W. Simpson Medal" is awarded annually to the best drilled cadet in the freshman, sophomore, or junior class. In 1927 the medal was awarded to W. T. Coker of Florence County.

Literary Society Medals. It is customary for the several literary societies to hold annual contests during the session. Gold medals are usually awarded to the best debaters, orators and declaimers.

The Chronicle Medals. *The Chronicle*, the monthly magazine published by the literary societies, also usually awards three gold medals, for the best story, the best poem, and the best essay contributed by students during the year.

Farmers' Certificates of Merit. Beginning with the session of 1914-1915 certificates of merit have been awarded each session to two farmers in South Carolina who have rendered distinguished service in the agricultural development of the State.

In 1927 the certificate was awarded to Mr. W. L. McCoy, McBee, S. C.

National Association of Cotton Manufacturers Medal. For several years this medal has been awarded to the outstanding graduate in Textile Engineering. In 1927 the medal was won by Cadet D. L. Pickelsimer of Anderson County.

State U. D. C. Prize. Each year the State organization United Daughters of the Confederacy awards a prize to competitors from the University of South Carolina, The Citadel and Clemson, for the best essay on some historic character or event. In 1927, a Clemson cadet, M. A. Jones of Richland County, a member of the junior class, was given the prize for the best essay on "John C. Calhoun, Exponent of States Rights."

RULES FOR PROMOTION

1. The semester hour shall be the basis of all credits. One recitation hour or three laboratory or shop hours a week if self-contained, or two if considerable work is required out of the class period, shall constitute a semester hour.

2. The standing of a student in his work at the end of a semester shall be based on daily class work, regularity of attendance, tests or other work, and the final examinations.

3. Written examinations shall be required in all subjects at the end of each semester, except in certain laboratory or practical courses where not deemed necessary by the departmental faculty. A student who has been absent from more than one-fourth of the total number of class periods in any subject for a semester is debarred from the final examination.

4. A semester grade once reported to the Registrar shall be the final grade for the period covered.

5. Separate grades shall be given on theoretical and practical work except where in the judgment of the departmental faculty separate grades are not practical.

6. No semester grade shall be given out until the close of the examination period for that class.

7. When an instructor completes a subject he may hold an examination on it before beginning the next subject, provided such examination does not conflict with the regularly scheduled work.

8. The grading system shall be as follows:

A—Excellent. Indicates that the student is doing work of a very high character. The highest grade given.

B—Good. Indicates work that is satisfactory, though not of the highest order.

C—Fair. Indicates work of average or medium character.

D—Pass. Indicates work below the average and unsatisfactory. The lowest passing grade. For graduation a student must have a grade above D on 50 percent of his total credit hours.

E—Conditioned. Indicates a failure to satisfy the requirements as to daily recitations, tests or other work, as well as to the final examination, which condition in the opinion of the instructor may be made up by reexamination at some fixed time.

F—Failed. Indicates that a student knows so little of the subject that it must be repeated in order that full credit may be received.

I—Incomplete Work. Indicates an absence from examination on account of sickness or other satisfactory reason, or that a relatively small part of the semester's work remains undone. A grade *I* is not to be given a student who has made a grade *F* on his daily work.

9. *Absences from Class or Examination. Removal of Grade I.* A student who has been absent from more than one-fourth of the total class periods in a subject during a semester may be dropped from the class. Such a student who is permitted to continue in class shall not stand the final examination until the work missed has been made up.

All work missed on account of absences for good and sufficient reasons shall be made up to the satisfaction of the instructor within thirty days after the student returns to classes.

All incomplete grades (*I*'s) not removed before the first class day of the first semester shall become failures (*F*'s), and must be taken over as such.

A student who, for reasons satisfactory to the faculty, is ab-

sent from any of the first semester examinations will be allowed to make up these examinations during the second semester at the convenience of the instructor or during the reexamination period just before Commencement. A student who is absent from any of the second semester examinations shall stand them during the make-up period in September. A student who is absent from an examination without excuse is graded *E*.

10. *Removal of Conditions.* Only one opportunity shall be given a student to remove a condition (*E*) by a reexamination. A student who fails to pass such a reexamination shall be required to repeat the subject hour for hour in class. Not more than twelve credit hours of conditions for a session shall be removed by reexamination. A student shall not receive a grade higher than *D* when a deficiency is removed by reexamination.

First semester reexaminations shall be held just before Commencement in June, and second semester reexamination just before the opening of college in the fall. All conditions (*E*'s) not removed before the first class day of the first semester shall become failures and be repeated as such. Seniors may remove conditions during the week preceding Commencement.

11. *Removal of Failures.* A student who has failed (made a grade *F*) in a subject cannot receive credit for that subject until it has been repeated hour for hour in class, except that in the case of correlated laboratory work, the number of hours to be taken shall be determined by the instructor. Where separate grades for class and laboratory work are given, that part of the subject shall be repeated in which the failure occurs.

12. *Withdrawals on Account of Unsatisfactory Work.* A student who at the end of the first semester has failed (made a grade *F*) on nine or more credit hours of work shall be required to withdraw from college. A student who at the end of the session has failed (made a grade *F*) on eighteen or more credit hours of work shall not be permitted to return the following session. (Should the application of this rule at the end of the first semester not be to the best interest of an individual student, he may be permitted to continue on probation and schedule a

fewer number of hours. Such a student carrying less than a normal schedule must pass on all his work at the end of the next semester or be required to withdraw.)

Any student whose record is generally unsatisfactory at the end of a semester may be dropped from the College, provided the student and his parent or guardian were warned at mid-semester of this probable action.

13. *Amount of Class Work Permitted and Required. Prerequisites.* The normal amount of work a student is expected to schedule shall be the number of credit hours listed in the curriculum which he is pursuing, plus a proportionate number of electives as explained under "Requirements for Degree". A student shall not be permitted to schedule extra subjects or take over in addition to his normal schedule any work unless he has made during the preceding semester a grade of *B*, or above, on at least 50 percent of the total scheduled credit hours. Not more than five clock hours of work may be scheduled in addition to the number of credit hours prescribed in the curriculum.

A continuation subject in the next higher class shall not be scheduled until credit has been received for its prerequisites.

14. *Dropping Class Work.* Upon the recommendation of the instructor concerned and approval of the director, a student may be required to drop a subject because of neglect, excessive absences, or lack of application or preparation. A student required to drop a subject shall be placed on probation for the remainder of the semester, and his parent or guardian shall be notified.

A student who at the end of a semester makes a grade *F* on six, but not more than eight, credit hours of work or who makes a grade *E* on ten or more credit hours of work, shall be required to drop from his schedule at least one theoretical subject. (See Rule 12.)

15. *Time of Scheduling Work.* All students shall register for classes during the first two days of the semester. No subject may be added or scheduled by a student after the sixth class day of a semester.

16. *Deficiencies in Year Courses.* A student who is conditioned (makes a grade *E*) on the first and second semesters' work of a subject continuing throughout the session shall be required to repeat the subject in class at the next recurrence.

17. *How to Raise a Grade E.* A grade *E* may be removed as prescribed in Section 11. However, if a student makes a grade *E* in a subject which continues beyond the first semester and to the end of the second semester, the instructor may at the end of the session recommend that the grade be raised to a *D*, provided the grade made on the work of the second semester is *A* or *B*. In such a case the recommendation of the instructor shall be made a special report, must be approved by the director of the department, and must accompany the grades of the second semester.

18. *Promotion to the Senior Class.* A student shall not be permitted to enroll in the senior class until all the work of the freshman and sophomore classes has been completed.

19. *Requirements for Graduation.* For graduation a student must have completed as many credit hours as are required in his course with a grade above *D* on 50 percent of the total credit hours. All work must be completed before 5 P. M. on the Saturday preceding Commencement.

Residence of at least one regular session shall be required for graduation.

20. *Seniors Failing to Graduate.* A senior who fails to graduate because of either one *E* or one *F* on any subject shall have an opportunity of removing it by examination during the make-up period in September, provided he can furnish evidence of having done satisfactory study. Failing to do this he shall take the subject over with the next class. In either case, the degree will not be awarded until the following Commencement.

21. *Change in Course.* Aimless shifting is discouraged; but for good reasons a change in course for freshmen and sophomores may be made during the first thirty days of the session.

22. *Textbooks and Supplies.* Each student shall be re-

quired to own his individual text books and the necessary equipment, except in the case of brothers in the same class who room together.

All requests from the students to the faculty must be made in writing.

DEGREES AND DIPLOMAS

The degree of *Bachelor of Science* is awarded to those students who satisfactorily complete one of the four-year curricula. The course completed is specified on each diploma.

All work for a degree must be completed by 5 P. M. on the Saturday preceding Commencement. Residence of at least one regular session is required for graduation. Diplomas are delivered to the candidates on Commencement Day.

Every candidate for a degree must pay to the Treasurer of the College prior to graduation the cost of the diploma.

PART III.—STUDENT LIFE AND ACTIVITIES

LIVING CONDITIONS

At Clemson students live in barracks under military discipline. The College is located away from the distractions of city life but possesses many of its advantages. A student must at all times be present or accounted for.

The three barracks which house the students are steam heated and electrically lighted from the central power station located in rear of Barracks No. 2. Each building is provided with ample toilet facilities. In addition to the hot and cold water supplied to each of the barracks, running spring water is pumped to each floor for drinking.

The barracks or dormitories are divided into "halls" for military purposes, a unit being assigned to a hall under the supervision of a cadet officer.

Cadet officers remain on duty in the guard room both day and night. A long distance telephone with twenty-four hour service is located in the guard room.

Each student room is equipped with necessary furniture. The beds are single width. Bed linen, bed covers, pillows and towels must be furnished by the students.

All students are required to provide themselves with two mattress covers and two clothes bags. These are regulation articles and can be secured only at the College. One set will likely serve for use during the four years.

The dining hall or mess hall is located in Barracks No. 1 and is under the supervision of the mess officer. The mess hall is well equipped with silverware, china, glassware, table linen, etc. The kitchen and cold storage plant is one of the very best in the South. All students living in the barracks eat in the mess hall.

RESERVE OFFICERS' TRAINING CORPS

Under the provisions of the National Defense Act, the War Department has established at Clemson College an infantry unit of the Reserve Officers Training Corps. All students of the College, unless excused by the President, are required to take a minimum of three hours per week of military training. To be admitted to membership in the corps and to receive the privileges connected therewith, juniors and seniors must be recommended by the President and the Professor of Military Science and Tactics. All members at the completion of the junior class will be required to attend a summer camp, where their expenses will be paid by the Federal Government. After graduation the student may upon the recommendation of his instructors, receive a commission in the Officers Reserve Corps. As long as Clemson College is designated by the War Department as a "Distinguished College", five percent of its graduates may be commissioned as second lieutenants in the regular army on the same basis as are graduates from the United States Military Academy at West Point.

CARE OF THE SICK

The Surgeon is one of the regular officers of the College, and his special duty is to look after the health of the students. He has charge of the hospital, and supervises all matters pertaining to the sanitation of barracks.

At a specified time every day, students who so desire may consult the Surgeon, and those who are sick are cared for by experienced nurses in the college hospital. In case of necessity students are allowed to consult the Surgeon at any time, or send for him, as may be required.

The material facilities for the hospital have been improved recently. An X-ray machine has been installed which is a very valuable asset.

The College Surgeon who has charge of the sick is assisted by a registered nurse and an X-ray and laboratory technician.

The Surgeon cannot undertake to notify parents every time

a student reports to the hospital for medicine, or for rest on account of some slight complaint. However, they may rest assured that they will be promptly notified of sickness of any consequence. In case of serious illness the Surgeon will telegraph them.

RELIGIOUS INFLUENCES

Clemson co-operates with the various churches and the Y. M. C. A. in the religious training of its students.

Four denominations, Baptist, Episcopal, Methodist, and Presbyterian, have erected churches in the community. All Protestant students are required to attend the Sunday morning services at one of the churches. Arrangements are made for services for students of other denominations.

Devotional services are held regularly in chapel. The college pastors conduct these exercises.

Sunday schools and young people's church societies are maintained by the local churches. Attendance upon these services is voluntary.

The Young Men's Christian Association. The Young Men's Christian Association is housed in its own building. The "Y" has become the chief social gathering place and is the center of voluntary religious activity. During the current session approximately 600 students have been enrolled in voluntary Bible study classes. Three trained secretaries are employed by the Association.

The Young Men's Christian Association has supervision of the voluntary religious activities of the students and endeavors to serve the religious, social and physical life of the college community in keeping with the general policies of the international organization. It is a democratic student organization, advised by a board of faculty and business men. The general secretary is elected by this board and he, with the advice and consent of the board, selects an assistant secretary. The secretaries have no official connection with the College as disciplinarians or instructors.

The student officers are elected annually by the active members. The president has the appointive power and selects a chairman for each committee. The chairman of each committee then selects his committeemen. These chairmen constitute the cabinet and meet regularly each week for consultation and reports. The work is divided into Bible Study, Mission Study, Community Service, Membership Conferences, Socials, Religious Meetings, Church Relationships, Evening Watch, Gospel Teams, and Boys' Work.

Opportunity is afforded each man to enroll in one of the voluntary Bible classes. These classes are led by students, members of the faculty and ministers of the different churches.

The Sunday night union service is held at the Y. M. C. A. and has been attended by approximately four hundred each night. Local and visiting speakers speak at these services.

Numerous speakers of State-wide and national importance are brought to Clemson through the efforts of the Y. M. C. A.

ATHLETICS

It is the policy of the College to sanction and encourage athletics so long as this does not interfere with studies and other duties. Football, baseball, basketball and track are the most popular sports, and it is assumed that parents are willing for their sons to participate in these games unless the President is definitely notified to the contrary. The College is a member of the Southern Intercollegiate Conference (S. I. C.) and of the South Carolina Intercollegiate Athletic Association (S. C. I. A. A.).

Intercollegiate Athletics. For the regulation of intercollegiate athletics, the faculty has adopted the following rules:

1. No student who has a class mark lower than passing in more than eight hours of work in any one semester shall be allowed during the ensuing semester to take part in any intercollegiate contest. Changing from one course to another shall not interfere with the operation of this rule.

At the end of each grading period, the faculty athletic committee will canvass the record of athletes, and if any are found to be so deficient as to endanger their scholastic standing, they will be withdrawn from the squad.

In order to participate in intercollegiate contests, each athletic team may be allowed a maximum absence of ten days during the session (Saturday afternoon, Sunday and holidays not to be included). No one contestant or representative shall be allowed to leave the campus for more than twenty days during the session, except at the discretion of the faculty athletic committee.

2. No member of an athletic team shall be eligible for a managerial position in any other branch of sport.

3. No team shall be allowed to leave the college grounds to participate in any match games unless accompanied by a member of the faculty, who shall be responsible to the faculty for the conduct of the players and coaches while away from the College. Such representative shall be appointed by the chairman of the faculty athletic committee, and his expenses shall be included in the expenses of the trip, provided that when any team, except the football team, leaves the college grounds, the chairman, at his discretion, may appoint a player or a manager in place of a member of the faculty.

4. No student shall be eligible to participate in an intercollegiate contest who is away from the College without proper authority, or without having complied with all the rules or orders issued by the President regarding such matters.

5. It shall be the duty of the faculty athletic committee to see that the foregoing rules and regulations are strictly enforced.

LYCEUM COURSE

A lyceum course, comprising about six numbers and employing some of the best talent on the American platform, is offered as a means of entertainment to students and others.

CLUBS AND SOCIETIES

Dairy Club. This is a student organization composed of juniors and seniors who are taking dairying. The object of this club is to promote interest in the dairy industry and to provide experience for students in leading discussions on various topics of interest in their chosen field. Members of the faculty of this division assist the students in carrying out these objectives.

Horticultural Club. The students who are interested in coming together for a study and discussion of the various phases of the horticultural field—vegetable gardening, truck farming, landscaping, and horticultural inspection work—have an opportunity to do this with the cooperation of the instructional staff of the horticultural division in this organization.

Entomology and Zoology Club. The study of the sciences of entomology and zoology has stimulated interest to the extent that the students have organized a club which affords opportunity for experience in leading discussions and making reports of a scientific nature. This work is fostered by the faculty of this division.

Chemistry Science Club. This is a voluntary student organization the purpose of which is to keep in touch with current scientific literature and to provide an opportunity for leading discussions and giving scientific papers on topics of interest.

Agricultural students who major in chemistry as well as students who are candidates for the Bachelor of Science degree in chemistry are eligible to membership in this society. The chemistry faculty cooperates to the fullest in making this organization of real value.

English Club. This is a club composed of students in English, whose purpose is to stimulate a keener interest in good literature. Members of the faculty may become honorary members.

Journalistic Club. The purpose of this club is to stimulate an interest in written and spoken English, and to foster *The Chronicle* as the literary publication of the College. Awards are given those who attain certain definite standards.

The American Institute of Electrical Engineers. The Clemson College branch of this organization is composed of instructors and students belonging to the national institution. This branch is maintained with the aim of acquainting the students with current engineering practice and problems.

American Society of Mechanical Engineers. A local branch of the national society, composed of faculty members and of students pursuing mechanical engineering, is established at the College. Meetings are held periodically for the discussion of the latest engineering practices.

American Society of Civil Engineers. Membership in this is limited to civil engineering students as follows: All seniors in good standing, the seven juniors having the highest class standing, and the one sophomore having the highest class standing.

Regular meetings are held monthly, and at such other times as exigencies favor. At these meetings engineering practice is presented and discussed, speakers from outside the College being obtained as often as practicable.

Architectural Society. Students in architecture have formed an organization for the purpose of bringing them in contact with certain phases of that profession which are not given in the ordinary experience in class work. Occasionally prominent architects from near by cities are invited to lead discussions.

Textile Society. Students of the textile courses have organized a society for a study of this industry in South Carolina. Noted textile leaders are invited to address this organization. Members of the textile faculty cooperate with the students in carrying out their programs.

Dramatic Club. There has been considerable interest aroused in dramatics among the student body. This interest has found expression through the work of the Dramatic Club. This work is under the direction of faculty members who are especially interested in dramatics.

The Sabre Club, a local honorary military society sanctioned by the College authorities, is active along military lines and is instrumental in making better officers.

The Band. Clemson College has been noted for its excellent musical organizations, of which the band is the oldest. This organization occupies one section in barracks which affords opportunity for close contact with its members.

Each year the band is invited to many places in the State to give entertainments. The experience that a student has during his four years in college as a member of this organization is very valuable.

The Concert Orchestra. This organization is affiliated with the State Federation of Music Clubs, and is the most democratic of any of the musical groups. Officers are elected yearly, and consist of a president, vice president, business manager, and librarian. The object of the organization is presented in the following extract from the constitution:

“In order to cultivate a taste for orchestral music of real value, to improve ourselves in ensemble playing, and in order to furnish music of a standard character for those who enjoy it, as well as to derive pleasure ourselves, we hereby organize the Clemson Concert Orchestra.”

The Glee Club. The club is composed of student members and is trained by a student director. Permits are given this club, as to others, to visit neighboring towns to give concerts.

Literary Societies. Three literary societies—the Calhoun, the Columbian, and the Palmetto—furnish a valuable supplement to the work of the College. These societies afford facilities for practice in debate, oratory, declamation, and essay writing, and their members acquire valuable knowledge of parliamentary law and usage. The meetings are held weekly.

A representative is chosen from each society to enter the contest for the Trustees' Medal at Commencement. The societies themselves also award medals annually to the best debater, orator, and declaimer.

The societies occupy halls in the administration building. A small initiation fee is charged, and small yearly dues are collected to meet running expenses. All students are advised to join one of these societies.

The societies also send a representative to the annual contests of the South Carolina Intercollegiate Oratorical Association, which includes the following institutions: Furman University, Wofford College, Clemson Agricultural College, Presbyterian College of South Carolina, Erskine College, Newberry College, South Carolina Military Academy, and the University of South Carolina.

PUBLICATIONS

The Clemson College Chronicle, a monthly magazine designed to encourage literary work among the students, is published jointly by the literary societies.

The Tiger, a weekly paper, is devoted largely to athletics, alumni and local news.

Taps, an annual illustrated volume, is published under the auspices of the senior class.

Agricultural Education, a monthly bulletin, is issued by the Division of Agricultural Education.

News Notes, a weekly pamphlet, and *The Carolina Club Boy*, are issued by the Division of Agricultural Extension.

CLEMSON COLLEGE ALUMNI ASSOCIATION

The Alumni Association has established a permanent office in the main building on the campus. The office is in charge of a secretary, who is employed by the governing board of the Association. The Clemson office is a clearing house for all matters concerning the alumni. In addition to keeping accurate records of addresses and information concerning alumni, the Association has established at the Clemson headquarters a bureau for repairing Clemson class rings, and for securing duplicates of these rings.

A valuable service to alumni is rendered in assisting them in securing employment. Many employers have made contacts with alumni through the Secretary's office.

The Association holds its regular annual meeting at the College on Monday of Commencement. At this meeting all

officers, with the exception of the Secretary, are elected. The Secretary is elected by the governing board which is in turn responsible to the general Association for the conduct of its business. The purpose of the Alumni Association is to serve the College and the alumni in every possible way. All correspondence regarding its affairs is conducted through the Clemson office.

The Association issues at intervals *The Alumnus*, a publication devoted entirely to college and alumni news.

OFFICERS CLEMSON ALUMNI ASSOCIATION

President

D. W. Watkins, '09 ----- Clemson College

First Vice-President

W. B. Aull, '07 ----- Clemson College

Second Vice-President

F. J. Jervey, '14 ----- Washington, D. C.

Third Vice-President

David Jennings, '02 ----- New York City

Secretary-Treasurer

E. G. Parker, '24 ----- Clemson College

GOVERNING BOARD

Ex-officio

D. W. Watkins, '09 ----- Clemson College

Ex-officio

E. G. Parker, '24 ----- Clemson College

Term Expires 1932

C. W. Legerton, '03 ----- Charleston

Term Expires 1931

E. R. McIver, '05 ----- Florence

Term Expires 1930

A. H. Ward, '14 ----- Aiken

Term Expires 1929

E. N. Sitton, '11 ----- Sumter

Term Expires 1928

R. B. Waters, '16 ----- Sumter

PART IV.—ORGANIZATION AND GOVERNMENT

COLLEGE ORGANIZATION BY DEPARTMENTS AND DIVISIONS

1. *Agricultural Department*

{	Extension
	Teaching
	Research

 - Agricultural Economics
 - Agronomy
 - Animal Husbandry
 - Botany and Bacteriology
 - Dairying
 - Education
 - Geology and Mineralogy
 - Horticulture
 - Poultry
 - Rural Sociology
 - Veterinary Science
 - Zoology and Entomology
2. *Arts and Science Department*
 - Economics and Sociology
 - English
 - History
 - Mathematics
 - Modern Languages
 - Physics
3. *Chemistry Department*
 - Chemistry
 - Chemical Analysis (Public State Work)
4. *Engineering Department*
 - Architecture and Drawing
 - Civil Engineering
 - Electrical Engineering
 - Forge and Foundry
 - Mechanical Engineering
 - Machine Shop
 - Wood Shop
5. *Military Department*
 - Military Instruction
 - Military Discipline
6. *Physical Education*
 - Corrective Gymnastics
 - Intramural Athletics
 - Intercollegiate Athletics
7. *Textile Department*
 - Carding and Spinning
 - Industrial Education
 - Textile Chemistry and Dyeing
 - Textile Research
 - Textile Testing
 - Weaving and Design
8. *Public State Work*
 - Fertilizer Inspection and Analysis
 - Live Stock Sanitary Work
 - Crop Pest Commission Work
9. *Miscellaneous*
 - President's Office
 - Registrar's Office
 - Business Manager's Office
 - Treasurer's Office
 - Hospital
 - Library

COLLEGE GOVERNMENT

Board of Trustees. The government of the College is vested in a Board of thirteen members, six of whom are elected by the Legislature and seven life and self-perpetuating under the Clemson will. The function of this Board is legislative and not executive. The Board determines the general policy of the College, makes the laws for its government, and directs the expenditure of its funds.

The President is the chief executive and administrative officer of the Board of Trustees. He is the head of the College and is responsible for its satisfactory working and success.

The College is divided into seven teaching departments, namely: Agricultural, Arts and Science, Chemistry, Engineering, Military, Physical Education and Textile. A director is at the head of each department and is responsible to the President for its conduct and success. The departments comprise the various divisions indicated on the preceding page. Each division is in charge of a professor who acts as chief of the division. The President conducts all official business with each department through its director.

The Faculty consists of all officers of instruction in the College. The voting members are the directors, professors, associate professors, and assistant professors.

The faculty meets at least once a month, or whenever called by the President, and is an advisory body to the President, on the instructional work of the College and on such other business as he may bring before it.

Faculty Committees. In order to aid him in his executive duties and to carry on the instructional work of the College, the President appoints committees from the faculty. To these are assigned certain specified lines of work and the committees are clothed with full authority.

The Discipline Committee. The Discipline Committee is composed of six directors of departments and two full professors elected annually by the Board of Trustees. This com-

mittee constitutes the court of the College and tries cadets charged with serious offenses under the regulations. The President is the reviewing authority of the Discipline Committee, and may at his discretion set aside or modify the sentences imposed. A parent, or a cadet over age, has the right to appeal from the sentence of the Discipline Committee to the Board of Trustees, provided the appeal is lodged with the President of the College within thirty days. This appeal must be forwarded to the President of the Board of Trustees, who if he deems the appeal meritorious, shall present it at the next regular or called meeting of the Board.

All trials by the Discipline Committee are open to the public, and all testimony is taken under oath and recorded stenographically as in a civil court. A student on trial may have some member of the faculty to assist him in his defense if he so desires.

CADET MILITARY ORGANIZATION AND GOVERNMENT

Clemson College is operated as a military school,—not for the purpose of making soldiers, but in order that the students may learn important life-lessons of obedience to authority, punctuality, system, courtesy and loyalty. The military system insures proper exercise and physical development, guarantees to the parent that the student shall at all times be present at the College, or away by proper authority, insures attendance upon classes and other duties, and insures proper provision for study as well as for recreation.

The military system places every student on the same basis. All students must dress alike, live under the same conditions, and be subject to the same privileges and the same restraints. No distinction whatever is made because of wealth or social position or any other such consideration. The only distinguished men in a cadet corps are those who achieve the distinction by being able to do some one thing better than their fellow students.

The military system does not in any way interfere with the regular college work, and on the other hand enables this to be carried on at the highest efficiency. It is the military training

more than any other single feature that gives to Clemson's graduates an advantage which is an important factor in their future progress and success.

The President. The President of the College shall have the general command and government of the institution, watching over its administration, discipline and instruction. He shall have authority to make rules from time to time, governing the granting of permits and furloughs to cadets; to inspect anything in a cadet's room or personal baggage; to suspend or modify these regulations, or to publish special regulations when he considers it necessary, which shall have the authority of the Board of Trustees until they shall act on the same. He shall prescribe the hours of study, drill and recreation.

Commandant. The Commandant of Cadets, under the President, has supervision of the Corps of Cadets in all that pertains to its organization, drill, discipline and administration. He shall prescribe the order in which the furniture, bedding, books, clothing, equipment, etc., shall be arranged throughout the barracks and shall make a thorough inspection of the rooms, furniture, arms, equipment and uniforms of the cadets at least once each week. He shall have the right to inspect anything in a cadet's room or personal baggage. He shall perform such other duties as are prescribed in these regulations. He shall have the rank of Colonel.

Assistant Commandants. The Assistant Commandants shall perform such duties as may be prescribed for them by the President or Commandant.

Military Instruction. All students, excepting such students as are excused by the President, must take a minimum of three hours military instruction per week. All who pass the required physical examination must take the Basic Course prescribed by the War Department for the R. O. T. C. during their freshman and sophomore years.

Members of the junior and senior classes are selected by the Professor of Military Science and Tactics, subject to the approval of the President, to take the Advanced Course prescribed

for the R. O. T. C., receiving certain financial benefits allowed by the Federal Government.

Cadet Officers and Non-commissioned Officers. The cadet officers and non-commissioned officers are appointed by the Commandant, subject to the approval of the President. When practicable they shall be appointed from members of the R. O. T. C. who have been most studious and soldier-like in the performance of their duties and most exemplary in their conduct. No cadet may decline any office to which he may be appointed.

As a rule the officers shall be appointed from the senior class, the non-commissioned officers, except corporals, from the junior class, and the corporals from the sophomore class.

Study Hours. Study hours are those parts of the day which are designated for study and shall be prescribed in orders. All hours from 8 A. M. to 4 P. M. at which a student has no classes or other duties are designated as study hours and students are expected to use this time as well as the study period after supper for study.

Furlough and Passes. Any cadet who has been granted a furlough or pass and who stays over the time stipulated, unless for sickness or other good and valid reason acceptable to the Commandant, will be awarded a punishment not to exceed one month's arrest and twenty demerits. In case a cadet is prevented by sickness from returning at the stipulated time, he must submit a certificate from his attending physician. However, no such certificate will be accepted unless the President or the Commandant has been notified in advance of the expiration of the furlough.

Cadets returning late on furlough or pass are placed in room arrest pending an investigation of the reason of the late return.

All communications from parents requesting furloughs for their sons must be addressed or sent directly to "The Commandant" or to "The President", and must set forth fully the reason for the request. No furloughs will be granted unless the

reasons given are considered satisfactory and sufficient justification for any loss of time for absence from classes or other duties. Telegrams which do not explain fully will not be accepted as complying with the above rules. In any case in which business is given as a reason, the nature of the business must be explained fully.

A parent has the right to demand a discharge from college at any time and for any reason but the college authorities reserve the right to grant or refuse to grant furloughs.

Week-End Leaves. Week-end leaves will be granted under conditions prescribed by the President.

Demerits. Demerits are awarded for every unremoved report, the number depending on the nature and degree of the offense. Any regular cadet receiving 65 demerits, or any day cadet receiving 50 demerits, or any special or day student receiving 50 demerits, during any one semester shall be required to withdraw from College.

Discharge. No cadet unless twenty-one years of age and paying his own way at college shall be discharged except on the written application of his parents or guardian addressed to the President or the Commandant, or for reasons satisfactory to the President.

Motor Vehicles. No cadet, day cadet, special student, or day student shall own or operate any automobile or motorcycle during the regular session of the College, except by special permission from the President.

PART V.—REQUIREMENTS FOR DEGREES, COURSES OF STUDY

REQUIREMENTS FOR DEGREES

The degree of Bachelor of Science is awarded to those students who satisfactorily complete one of the four year curricula. In addition to the prescribed courses at least sixteen hours of free electives are required. Other electives are subject to the approval of the director of the department in which the major course is taken. Any subject is elective provided the requirements of the major curriculum are fulfilled and the student has had the prerequisites of that subject, and meets the other conditions. A minimum of sixteen semester credit hours is required. No student is allowed to take over twenty semester credit hours without special permission of the Registrar. Subjects in major courses other than those prescribed may be elected with the consent of the director.

All work for a degree must be completed by 5 P. M. on the Saturday preceding Commencement. Residence of at least one regular session is required for graduation. Diplomas are delivered to the candidates on Commencement Day.

Prior to graduation, every candidate for a degree must pay to the Treasurer of the College the cost of his diploma.

A two hour per week non-credit course will be required of all students who do not show a proficiency in English Composition.

“How to Use the Library” is a course required of all freshmen for one hour per week every other week.

Where summer work is scheduled the director may give credit for it as a substitute for practical work.

In the curricula which follow are given the official title and number of the course, the descriptive title, number of semester hours credit, and in parentheses the number of hours per week in class and laboratory, respectively.

COURSES OF STUDY

The College offers the following courses of study:

1. *Agriculture*

Four-year courses in Agriculture with major work in (a) Agronomy, (b) Animal Husbandry, (c) Agricultural Chemistry, (d) Dairy Husbandry, (e) Agricultural Economics, (f) Education, (g) Horticulture, (h) Zoology and Entomology.

2. *Arts and Science*

- (a) Four-year General Course.
- (b) Pre-Medical Course.

3. *Chemistry*

Four-year course in Chemistry.

4. *Engineering*

- (a) Four-year course in Architecture.
- (b) Four-year course in Civil Engineering.
- (c) Four-year course in Electrical Engineering.
- (d) Four-year course in Mechanical Engineering.

5. *Textiles*

- (a) Four-year course in Textiles.
- (b) Four-year course in Industrial Education.
- (c) Four-year course in Textile Industrial Education.

6. *Summer School*

Short courses are offered during the months of June and July to teachers, cotton graders, agricultural club boys, and college students.

REQUIREMENTS FOR DEGREES

1.—AGRICULTURE

The course in agriculture, supplemented by work in mathematics, English, political economy, rural sociology, history, and the natural sciences, allows no differentiation during the first

and second years. Its object is to give the student a broad general knowledge of the subject so that he will have a sound foundation for specialization during his junior and senior years. At the end of the sophomore year it is expected that he will be able to choose intelligently which line of agricultural work he desires to follow.

In the junior year a student is given the choice of electing agricultural economics, agricultural education, agronomy, animal husbandry, chemistry, dairying, entomology or horticulture. A major course requires approximately six hours per week of recitations, and six hours per week of laboratory each semester. In addition to the major work during the senior year, a sufficient number of elective courses must be selected to bring the number of semester credit hours up to not less than 16 and not more than 20.

FRESHMAN YEAR

First Semester

Agr. 11, Field Crops.....	3	(3,0)
Chemistry 11, General	3½	(3,2)
English 11, Comp. and Am. Lit..	2	(2,0)
History 11, Citizenship	3	(3,0)
Library 11, How to Use	R	
Math. 15, Ag. Mathematics	3	(3,0)
M. E. 11, Ag. Forge	¾	(0,2)
M. E. 16, Ag. Woodwork	¾	(0,2)
Military Science 11	1	(0,3)
Physical Education 11	¾	(0,2)

17¾

Second Semester

Ag. Ec. 12, Elementary Ag. Ec. 3	(3,0)
A. H. 12, Farm Animals	2¾ (2,2)
Chemistry 12, General	3¾ (3,2)
English 12, Comp and Am. Lit..	2 (2,0)
Hort. 12, Veg. Gard.	2¾ (2,2)
Military Science 12	1¾ (1,2)
Orientation	½ (0,1)
Physical Education 12	¾ (0,2)
Poultry 12	1¾ (1,2)

18½

SOPHOMORE YEAR

Agr. 21, Farm Machinery	2¾ (2,2)
Botany 21, Agricultural	2¾ (2,2)
Chemistry 21, Analytical	2 (1,3)
English 21, Lit. and Adv. Comp..	2 (2,0)
Geology 21, Agricultural	3 (3,0)
Military Science 21	1 (0,3)
Physics 29	2¾ (2,2)
Agr. 20, Soils	2¾ (2,2)
Botany 22, Agricultural	2¾ (2,2)
Chemistry 22, Organic	2¾ (2,2)
Dairy Husb. 20, Dairying	2¾ (2,2)
English 22, Lit. and Adv. Comp. 2	(2,0)
Military Science 22	1¾ (1,2)
Z. & E. 22, Zoology	2¾ (2,2)

16

17

JUNIOR YEAR

Econ. & Soc. 33	3 (3,0)
English 31, Public Speaking	1 (1,0)
Military Science 31	1 (0,3)
English 32, Public Speaking	1 (1,0)
Military Science 32	1 (0,3)

SENIOR YEAR

*First Semester**Second Semester*

Military Science 41 -----1 (0,3) Military Science 42 -----1 (0,3)

1a.—AGRONOMY

JUNIOR REQUIRED

Agr. 31, Fertilizer & Manures --2 (2,0)	Agr. 30, Forage Crops -----3 (3,0)
Bacteriology 31, General -----3½ (2,4)	Agr. 32, Genetics -----2¾ (2,2)
Hort. 31, Fruit Growing -----2¾ (2,2)	Agr. Ec. 32, Price Economics--2¾ (2,2)
Z. & E. 31, Gen. & App. Ent. --2¾ (2,2)	Bot. 32, Forestry -----2¾ (2,2)
10¾	11

SENIOR REQUIRED

Agr. 41, Adv. Cotton -----2 (2,0)	Agr. 42, Soil Fertility & Man.--2 (2,0)
Agr. 45, Adv. Crops -----2 (2,0)	Agr. 44, Advanced Soils -----¾ (0,2)
Agr. 47, Adv. Crop Lab. -----¾ (0,2)	Agr. 50, Soil Problems -----1 (1,0)
Agr. 49, Plant Breeding -----2¾ (2,2)	Bact. 44, Soil Bacteriology ---3¾ (2,4)
Agr. 51, Crop Problems -----1 (1,0)	
8¾	7

1b.—ANIMAL HUSBANDRY

JUNIOR REQUIRED

A. H. 31, Prin. of Feeding ---2¾ (2,2)	Agr. 30, Forage Crops -----3 (3,0)
Bacteriology 31, General -----3½ (2,4)	A. H. 32, Judging -----¾ (0,2)
	Vet. 30, Anatomy & Physiology--2¾ (2,2)
6	6¾

SENIOR REQUIRED

A. H. 41, Feeds and Feeding --2¾ (2,2)	A. II. 40, Breeding -----2¾ (2,2)
A. II. 43, Animal Production --2¾ (2,2)	A. H. 42, Pork & Sheep Prod.--2¾ (2,2)
A. II. 45, Adv. Stock Judging--2¾ (2,2)	Farm Poultry 42 -----2¾ (2,2)
8	8

1c.—AGRICULTURAL CHEMISTRY

JUNIOR REQUIRED

Bacteriology 31, General --3½ (2,4)	Chem. 26, Organic -----3¾ (3,2)
Chemistry 25, Organic -----3¾ (3,2)	Geol. 34, Mineralogy -----2¾ (2,2)
Geol. 33, Mineralogy -----2¾ (2,2)	
9¾	6¾

SENIOR REQUIRED

First Semester

Chem. 41, Adv. Inorganic	2	(2,0)
Chem. 43, Colloids	2	(2,0)
Chem. 45, History	2	(2,0)
Chem. 47, Tech. Analysis	2	(0,6)
	8	

Second Semester

Chem. 42, Adv. Inorganic	2	(2,0)
Chem. 44, Colloids	2	(2,0)
Chem. 46, Stoichiometry	2	(2,0)
Chem. 50, Thesis	2	(0,6)
	8	

OR

Chem. 31, Physical	4½	(3,4)
Chem. 47, Tech. Analysis	2½	(0,8)
	7	

Chem. 32, Physical	4½	(3,4)
Chem. 47 or 50, Tech. Analysis or Thesis	2½	(0,8)
	7	

1d.—DAIRY HUSBANDRY

JUNIOR REQUIRED

A. H. 31, Prin. of Feed	2½	(2,2)
Bact. 31, General	3½	(2,4)
	6	

Agr. 30, Forage Crops	3	(3,0)
Chem. 38, Dairy Chemistry	3½	(2,4)
D. H. 30, Judging	¾	(0,2)
Vet. 30, Anatomy & Physiology	2½	(2,2)
	9½	

SENIOR REQUIRED

D. H. 41, Dairy Manufacturing	2½	(2,2)
D. H. 43, Creamery Org. & Man.	3	(3,0)
D. H. 45, Feeding and Manage- ment	2½	(2,2)
D. H. 47, Genetics	2½	(2,2)
D. H. 51, Problems	1	(1,0)
	12	

Bact. 40, Dairy Bact.	3½	(2,4)
D. H. 42, Dairy Manufacturing	3½	(2,4)
D. H. 44, Breeding	1½	(1,2)
D. H. 48, Adv. Dairy Farm	2½	(2,2)
D. H. 50, Problems	1	(1,0)
	12	

1e.—AGRICULTURAL ECONOMICS

JUNIOR REQUIRED

Ag. Ec. 31, Farm Management	2½	(2,2)
Bact. 31, General	3½	(2,4)
Eng. 40, Business Law	2	
	8	

Ag. Ec. 32, Price Economics	2½	(2,2)
Ag. Ec. 34, Farm Acct.	2½	(1,4)
Bot. 32, Forestry	2½	(2,2)
	7½	

SENIOR REQUIRED

Ag. Ec. 41, Adv. Ag. Ec.	3	(3,0)
Ag. Ec. 43, Marketing	2½	(2,2)
Ag. Ec. 45, Statistical Methods	1½	(1,2)
	7½	

Ag. Ec. 40, Rural Sociology	2½	(2,2)
Ag. Ec. 42, Rural Coop.	3	(3,0)
Ag. Ec. 50, Special Problems	1	(1,0)
Geol. 40, Ec. Geology	3	(3,0)
	9½	

1f.—AGRICULTURAL EDUCATION

JUNIOR REQUIRED

First Semester

A. H. 31, Prin. of Feed	-----2½ (2,2)
Ed. 31, Introduction to Ag. Ed.	3 (1,6)
Hort. 31	-----2½ (2,2)

8½

Second Semester

Bot. 32, Forestry	-----2½ (2,2)
Ed. 32, Ed. Psych.	3 (2,3)
Farm Poultry 42	-----2½ (2,2)

8½

SENIOR REQUIRED

Ed. 41, Prin. of Vocational Ed.	4 (1,9)	Ed. 40, Ag. Prac. Teaching	5 (0,15)
		Ed. 42, Methods in Ag. Ed.	3 (3,0)

4

8

1g.—HORTICULTURE

JUNIOR REQUIRED

Bact. 31, General	-----3½ (2,4)	Agr. 32, Genetics	-----2½ (2,2)
Hort. 31, Fruit Growing	-----2½ (2,2)	Ag. Ec. 32, Price Economics	2½ (2,2)
Z. & E. 31, Gen. & App. Ent.	2½ (2,2)	Bot. 30, Plant Physiology	-----3½ (2,4)
		Bot. 32, Forestry	-----2½ (2,2)

8½

11½

SENIOR REQUIRED

Hort. 41, Systematic Pomology	2½ (2,2)	Hort. 42, Commercial Pomology	2½ (2,2)
Hort. 43, Plant Propagation	2½ (2,2)	Hort. 44, Landscape Gard.	2½ (2,2)
Hort. 45, Olericulture	2½ (2,2)	Hort. 46, Olericulture	2½ (2,2)
Hort. 51, Special Problems	1 (1,0)	Hort. 50, Special Problems	1 (1,0)

9

9

1h.—ZOOLOGY AND ENTOMOLOGY

JUNIOR REQUIRED

Bact. 31, General	-----3½ (2,4)	Bot. 30, Plant Physiology	-----3½ (2,4)
Hort. 31	-----2½ (2,2)	Bot. 32, Forestry	-----2½ (2,2)
Z. & E. 31, Gen. & App.	-----2½ (2,2)	Z. & E. 32, Entomology	-----2½ (2,2)

8½

8½

SENIOR REQUIRED

Z. & E. 41, Econ. Ent.	-----2½ (2,2)	Z. & E. 42, Econ. Ent.	-----2½ (2,2)
Z. & E. 43, Shade Trees & Forest Insects	3 (2,3)	Z. & E. 44, Beekeeping	-----2½ (2,2)
Z. & E. 45, Insect Morph.	2½ (2,2)	Z. & E. 46, Syst. Ent.	-----2½ (1,4)
Z. & E. 47, Ani. Parasitology	2½ (2,2)	Z. & E. 48, Ornithology	1 (0,3)
Z. & E. 51, Prob. & Thesis	1 (1,0)	Z. & E. 50, Problems	1 (1,0)

12

9½

2.—ARTS AND SCIENCE

2a.—FOUR YEAR GENERAL COURSE

This course is planned to meet the needs of those students who for any reason desire general training in the natural and social sciences. It is particularly recommended for men preparing for medicine, law, teaching, and scientific investigation. It is designed to provide the maximum of adaptability to individual requirements.

Entrance.—Candidates for the B. S. degree in this course must present 15 standard high school units for entrance, divided as follows: English 3 units, mathematics 2.5 units, history 1 unit, science 1 unit, and one foreign language 2 units. The remaining 5.5 units may be chosen at will with regard to subjects. Candidates not presenting 2 units in one foreign language may, however, be entered upon condition of successful completion of two years of one language during his college course, provided he meets the other entrance requirements and presents a total of 15 units.

FRESHMAN YEAR

<i>First Semester</i>		<i>Second Semester</i>	
English 11, Comp. and Am. Lit.	2 (2,0)	Botany 10, General	3½ (3,2)
History 13, Pol. Science	2 (2,0)	English 12, Comp. & Am. Lit.	2 (2,0)
Library 11, How to Use	R	History 14, Am. Ec. Hist.	2 (2,0)
Modern Language*		Modern Language*	
and	6** (6,0)	and	6** (6,0)
Mathematics 17		Mathematics 18	
Military Science 11	1 (0,3)	Military Science 12	1½ (1,2)
Phys. Ed. 11	¾ (0,2)	Phys. Ed. 12	¾ (0,2)
Physics 13	4 (3,2)	Physics 14	4 (3,2)
Z. & E. 11, Zoology	3¾ (3,2)		
	19½		20

SOPHOMORE YEAR

Chem. 11	3¾ (3,2)	Chemistry 12	3¾ (3,2)
English 21, Lit. & Adv. Comp.	2 (2,0)	English 22, Lit. & Adv. Comp.	2 (2,0)
Geology 23,		History 22, Civilization	3 (3,0)
or	3 (3,0)	Modern Language (Cont.)**	
Modern Language**		or	3 (3,0)
History 21, Civilization	3 (3,0)	A Natural Science	
Military Science 21	1 (0,3)	Military Science 22	1½ (1,2)
	12¾		13½

*Subject to be chosen with advice of director of arts and science department.

**In lieu of language and mathematics 17 and 18, a student may choose mathematics 11 and 12, and 1 credit of approved elective, total 6 cr. hrs.

JUNIOR YEAR

*First Semester**Second Semester*

English 31, Public Speaking----	2	(2,0)	English 32, Business Law ----	2	(2,0)
Econ. & Soc. 31, Psychology--	3	(2,2)	Econ. & Soc. 32, Psychology--	3	(2,2)
Military Science 31 -----	1	(0,3)	Military Science 32 -----	1	(0,3)

SENIOR REQUIRED

Econ. & Soc. 41, Economics --	2	(2,0)	Econ. & Soc. 42, Sociology ---	2	(2,0)
Military Science 41 -----	1	(0,3)	Military Science 42 -----	1	(0,3)

In addition to the subjects prescribed above, sixty-four electives are required. Forty-eight of these must be taken from Groups 1 and 2 below, and sixteen may be selected from any subjects. Not less than 18 nor more than 20 hours may be scheduled each semester.

Group 1.—All courses offered by the following departments or divisions: agricultural economics, economics and sociology, education, English, history, modern languages, R. O. T. C. and music.

Group 2.—All courses offered by the following departments or divisions: botany and bacteriology, chemistry, geology and mineralogy, mathematics, physics, zoology and entomology, R. O. T. C. and music.

ADDITIONAL REQUIREMENTS

For graduation in this course two years of one foreign language must be successfully completed, either in a standard high school or in college.

Students in this course will meet the Director of the Arts and Science Department or his representative for advice and assistance.

2b.—PRE-MEDICAL

This course is planned for those students who wish to complete in two sessions the minimum requirements for admission to a standard medical college.

The work is composed largely of the coordinated courses in the biological and physical sciences. Elections under the advice

of the Director of the Arts and Science Department may be made. At least 18 hours work is required each semester.

Students who complete three years of a prescribed course and later graduate from a standard medical college may be awarded the B. S. degree in Arts and Science.

FRESHMAN YEAR

First Semester

Second Semester

Chem. 11, General -----3 $\frac{3}{4}$ (3,2)	Botany 10, General -----3 $\frac{3}{4}$ (3,2)
English 11, Comp. and Am. Lit.--2 (2,0)	Chem. 12, General Chemistry--3 $\frac{3}{4}$ (3,2)
History 13, Political Science --2 (2,0)	Eng. 12, Comp. and Am. Lit.---2 (2,0)
Library 11, How to Use -----R	Hist. 14, Am. Ec. History ----2 (2,0)
Math. 17, Math. for Science --3 (3,0)	Math. 18, Math. for Science---3 (3,0)
Military Science 11 -----1 (0,3)	Military Science 12 -----1 $\frac{3}{4}$ (1,2)
Modern Language -----3 (3,0)	Modern Language -----3 (3,0)
Phys. Ed. 11 ----- $\frac{3}{4}$ (0,2)	Phys. Ed. 12 ----- $\frac{3}{4}$ (0,2)
Z. & E. 11, Zool. -----3 $\frac{3}{4}$ (3,2)	

19

19 $\frac{3}{4}$

SOPHOMORE YEAR

Chem. 25, Organic -----3 $\frac{3}{4}$ (3,2)	Chem. 26, Organic -----3 $\frac{3}{4}$ (3,2)
Econ. & Soc. 31, Psych. -----3 (2,2)	Econ. & Soc. 32, Psych. -----3 (2,2)
Eng. 21, Lit and Adv. Comp.--2 (2,0)	Eng. 22, Lit. & Adv. Comp. --2 (2,0)
Military Science 21 -----1 (0,3)	Military Science 22 -----1 $\frac{3}{4}$ (1,2)
Modern Language (Cont.) ----3 (3,0)	Modern Language (Cont.) ----3 (3,0)
Physics 13 -----4 (3,2)	Physics 14 -----4 (3,2)

16 $\frac{3}{4}$

17 $\frac{1}{4}$

3.—CHEMISTRY

This course is intended to prepare the student to engage in manufacturing operations involving a knowledge of chemistry, or for employment as chemist in commercial, or fertilizer inspection, or food and feeding-stuff inspection laboratories, and for experiment station or U. S. Government service. A student who has satisfactorily completed this course will also be well equipped to teach elementary chemistry, and to pursue advanced work in chemistry.

Beginning with the junior year, elections are allowed to some extent to enable the student to fit himself for one of the above lines of work by pursuing the subject in the direction of chemical engineering, organic, physical, analytical and sanitary chemistry. The advances in all branches of chemistry have

made specialization to some extent necessary, whether the student expects to enter any of the various lines of work open to a graduate of a thorough course in chemistry, or to pursue graduate work. For the latter group, two years of a modern language should be included in the electives chosen as this is a common prerequisite for such graduate work at most universities.

FRESHMAN YEAR

First Semester

Chem. 11, General	3½	(3,2)
English 11, Comp. and Am. Lit.	2	(2,0)
Hist. 13, Political Science	2	(2,0)
Library 11, How to Use	R	
Math. 11, Trigonometry	5	(5,0)
Military Science 11	1	(0,3)
Phys. Ed. 11	¾	(0,2)
Physics 13, General	4	(3,2)

 18½

Second Semester

Chem. 12, General	3½	(3,2)
English 12, Comp. & Am. Lit.	2	(2,0)
History 14, Am. Ec. Hist.	2	(2,0)
Math. 12, Analytics	5	(5,0)
Military Science 12	1½	(1,2)
Phys. Ed. 12	¾	(0,2)
Physics 14, General	4	(3,2)

 19

SOPHOMORE YEAR

Chem. 23, Qualitative	4¾	(2,8)
Chem. 25, Organic	3¾	(3,2)
Drawing 11, Freehand	¾	(0,2)
Drawing 13, Mechanical	¾	(0,2)
English 21, Lit.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)
Military Science 21	1	(0,3)

 17¾

Chem. 24, Quantitative	4¾	(2,8)
Chem. 26, Organic	3¾	(3,2)
Drawing 12, Freehand	¾	(0,2)
Drawing 14, Mechanical	¾	(0,2)
English 22	2	(2,0)
Math. 22, Int. Calculus	5	(5,0)
Military Science 22	1¾	(1,2)

 18½

JUNIOR YEAR

Chem. 31, Physical	4½	(3,4)
Chem. 33, Quantitative	1½	(0,4)
Chem. 35, Organic	2¾	(2,2)
Econ. & Soc. 41, Economics	2	(2,0)
English 31, Public Speaking	2	(2,0)
Geol. 33, Mineralogy	2¾	(2,2)
Military Science 31	1	(0,3)

 16

Chem. 32, Physical	4½	(3,4)
Econ. & Soc. 42, Sociology	2	(2,0)
English 41, Business Law	2	(2,0)
Geol. 34, Mineralogy	2¾	(2,2)
Military Science 32	1	(0,3)

 12

SENIOR YEAR

Chemistry 45, History	2	(2,0)
Chemistry 43, Colloids	2	(2,0)
Chemistry 41, Adv. Inorg.	2	(2,0)
Chemistry 47, Tech. Anal.	3	(0,9)
Military Science 41	1	(0,3)

 10

Chemistry 46, Stoich	2	(2,0)
Chemistry 44, Colloids	2	(2,0)
Chemistry 42, Adv. Inorg.	2	(2,0)
Chemistry 50, Thesis	3	(0,9)
Military Science 42	1	(0,3)

 10

4.—ENGINEERING

4a.—ARCHITECTURE

The object of this course is to give the student such training in architectural design, building construction and allied subjects as will make him, upon graduation, of immediate value in an architect's office as a draftsman, and after a few years experience capable of practicing as an architect. The course is a well rounded, cultural one, fitting the graduate for a number of allied professions.

Fully recognizing that architecture is foremost among the fine arts and while giving design and accessory subjects greatest emphasis, particular attention is paid to the structural elements so that the completed building shall have strength as well as beauty. Architectural design, the principal subject, extends throughout the four years. In this the student is given certain requirements for a building or a group of buildings, and studies out his own solution under the criticism of the instructor. All work is individual and every effort is made to develop the student's individuality, imagination and creative ability. Skillful draftsmanship and artistic presentation are insisted upon.

A short course in descriptive geometry, shades and shadows and perspective is given in the freshman year. Free hand drawing and rendering in charcoal, pencil, pen and ink and water colors extends throughout the four years. History of architecture and history of art are given in the sophomore and senior years. Strong courses in mathematics, graphic statics, strength of materials, reinforced concrete and building construction are given. Along with this the student makes working drawings which consist of complete plans and specifications for a building, prepared as in the office of the practicing architect. In order to keep the student in touch with the progress of his profession, to give him a better appreciation of his college training and to enable him to be of more use in an architect's office after graduation, he is required to devote portions of his summer vacation periods to work in an architect's office or on some large building construction. Each spring stu-

dents take an educational trip to study examples of architecture and construction.

The work in architecture will be moved into new quarters especially designed for it, occupying practically all of the top floor of the new engineering building. One feature will be a great drafting room with drafting tables for all students. This is a marked advantage as all may study their problems in design and have the benefit of mutual help and criticism. Adjoining is a large studio equipped with plaster casts and models suitable for the needs in freehand drawing and water color work. This room has alcoves and screens with northern and sky lighting for light control and individual work.

This department has a large working library adjoining the drafting rooms containing many expensive volumes covering architecture and allied subjects, photographs, plans and illustrations, lantern slides, drawings and models, and files of practically all of the leading architectural magazines, both American and foreign. A complete exhibit of building materials and appliances especially arranged for instructional purposes is kept in the structural drafting room.

FRESHMAN YEAR

First Semester

Arch. 11, Elems. of Arch.	1½	(0,4)
Arch. 13, Freehand Drawing ..	¾	(0,2)
Arch. 15, Descrip. Geom.	¾	(0,2)
English 11, Comp. & Am. Lit. ...	2	(2,0)
French 11	3	(3,0)
Math. 11, Trigonometry	5	(5,0)
Physics 11, General	4	(3,2)
Military Science 11	1	(0,3)
Phys. Ed. 11	¾	(0,2)
Library 11, How to Use	R	

18¾

Second Semester

Arch. 12, Arch. Design	1½	(0,4)
Arch. 14, Freehand Draw.	1½	(0,4)
Arch. 16, Sh. Shad. & Persp.	¾	(0,2)
English 12, Comp. & Am. Lit. ...	2	(2,0)
French 12	3	(3,0)
Math. 12, Analytics	5	(5,0)
Physics 12, General	4	(3,2)
Military Science 12	1½	(1,2)
Phys. Ed. 12	¾	(0,2)

19¾

SOPHOMORE YEAR

Arch. 21, Arch. Design	4¾	(0,14)
Arch. 23, Cast. Drawing	1	(0,3)
Arch. 25, Hist. of Arch.	3	(3,0)
French 21	3	(3,0)
Eng. 21, Lit. & Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)
Military Science 21	1	(0,3)
Arch. 22, Arch. Design	4¾	(0,14)
Arch. 24, Cast Draw	1	(0,3)
Arch. 26, Hist. of Arch.	3	(3,0)
French 22	3	(3,0)
Eng. 22, Lit. & Adv. Comp.	2	(2,0)
Math. 22, Int. Calculus	5	(5,0)
Military Science 22	1½	(1,2)

19¾

20¾

JUNIOR YEAR

First Semester

Second Semester

Arch. 31, Arch. Design -----7½ (0,22)	Arch. 32, Arch. Design -----7½ (0,22)
Arch. 33, Cast Drawing -----1 (0,3)	Arch. 34, Cast Drawing -----1 (0,3)
Arch. 35, Historic Ornament -- ¾ (0,2)	Arch. 38, Bldg. Construc. -----2¾ (2,2)
Arch. 37, Bldg. Const. -----3¾ (3,2)	C. E. 34, Graphic Statics -----1¾ (1,2)
M. E. 31, Mechanics -----3 (3,0)	M. E. 32, Mech. of Mater -----3 (3,0)
Eng. 31, Public Speaking -----2 (2,0)	Eng. 32, Business Law -----2 (2,0)
Military Science 31 -----1 (0,3)	Military Science 32 -----1 (0,3)
18¾	18¾

SENIOR YEAR

Arch. 41, Arch. Design -----7 (0,21)	Arch. 42, Arch. Design -----6¾ (0,20)
Arch. 43, Bldg. Const. -----3 (3,0)	Arch. 44, Bldg. Const. -----3 (3,0)
Arch. 45, Struct. Design -----2 (0,6)	Arch. 46, Struct. Design -----2¾ (0,8)
Arch. 47, Mech. Plant -----2 (2,0)	Arch. 48, Profess. Prac. -----1 (1,0)
C. E. 47, Reinforced Conc. ---2 (2,0)	Arch. 40, Life Drawing -----¾ (0,2)
Econ. & Soc. 41, Econ. -----2 (2,0)	Arch. 40.5, Hist. of Art -----2 (2,0)
Military Science 41 -----1 (0,3)	Econ. & Soc. 42, Sociology ---2 (2,0)
	Military Science 42 -----1 (0,3)
19	19

Eights weeks of practical work in architects' offices or on large building construction approved by the architectural faculty is required for graduation. (Arch. 50.)

4b.—CIVIL ENGINEERING

This course is intended to prepare young men for entrance upon professional practice in some of the many branches of civil engineering, and also to meet the needs of those who, having been engaged in engineering work without a course of instruction, desire to equip themselves for more successful competition with those who have had such instruction.

In connection with the technical studies, liberal training is given in English, history, economics, pure mathematics, and the physical sciences. The course will also be found to embrace a considerable amount of drawing, shop work, and short courses in electrical engineering and mechanical engineering.

The distinctive work pursued by students in this course includes the field and office work of surveying and leveling; topographic surveying and drafting; the location and construc-

tion of railroads and highways, bridges, and other structures in connection therewith; involving investigation as to the strength of the materials of construction and the theories involved in the use thereof; masonry construction; foundations on land and under water; a particular study of highway engineering, including a laboratory course covering all the standard tests of highway material, both bituminous and non-bituminous; municipal and sanitary engineering, including water-supply, sewerage and drainage; and a brief study of engineering law including contracts and specifications. Actual design, as well as analytic investigation, is given in all cases.

A summer surveying camp of two weeks is held between the sophomore and junior years.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	-----	$\frac{3}{8}$	(0,2)
Drawing 13, Mechanical	-----	$\frac{3}{8}$	(0,2)
English 11, Comp. & Am. Lit.	---2		(2,0)
History 13, Political Science	--2		(2,0)
Library 11, How to Use	----R		
Math. 11, Trigonometry	-----5		(5,0)
M. E. 13, or M. E. 17	-----1 $\frac{1}{2}$		(0,4)
Military Science 11	-----1		(0,3)
Phys. Ed. 11	-----	$\frac{3}{8}$	(0,2)
Physics 11, General	-----4		(3,2)

17 $\frac{1}{8}$

Second Semester

Drawing 12, Freehand	-----	$\frac{3}{8}$	(0,2)
Drawing 14, Mechanical	-----	$\frac{3}{8}$	(0,2)
English 12, Comp. & Am. Lit.	---2		(2,0)
History 14, Am. Ec. Hist.	---2		(2,0)
Math. 12, Analytics	-----5		(5,0)
M. E. 14, or M. E. 18	-----1 $\frac{1}{2}$		(0,4)
Military Science 12	-----1 $\frac{1}{2}$		(0,2)
Phys. Ed. 12	-----	$\frac{3}{8}$	(0,2)
Physics 12, General	-----4		(3,2)

18

SOPHOMORE YEAR

C. E. 21, Surveying	-----3 $\frac{1}{2}$		(2,4)
Chem. 11, General	-----3 $\frac{1}{2}$		(3,2)
Drawing 25, Mechanical	-----	$\frac{3}{8}$	(0,2)
English 21, Lit. & Adv. Comp.	---2		(2,0)
Math. 21, Dif. Calculus	-----5		(5,0)
Military Science 21	-----1		(0,3)
Physics 23, Laboratory	-----1		(0,2)
Physics 25, Mech. El. & Light	---2		(2,0)

18 $\frac{3}{8}$

C. E. 22, Surveying	-----3 $\frac{1}{2}$		(2,4)
Chem. 12, General	-----3 $\frac{1}{2}$		(3,2)
Drawing 26, Structural	-----	$\frac{3}{8}$	(0,2)
English 22, Lit. & Adv. Comp.	---2		(2,0)
Math. 22, Int. Calculus	-----5		(5,0)
Military Science 22	-----1 $\frac{1}{2}$		(1,2)
Physics 24, Laboratory	-----1		(0,2)
Physics 26, Mech. El. & Light	---2		(2,0)

19 $\frac{1}{8}$

JUNIOR YEAR

First Semester

C. E. 31, Railroad Curves -----3	(3,0)
C. E. 33, Const. Methods -----2	(2,0)
English 31, Pub. Speaking -----2	(2,0)
M. E. 31, Mechanics -----3	(3,0)
M. E. 33.5, Machine Shop ---- $\frac{3}{4}$	(0,2)
M. E. 37, Mech. Engr. -----3	(3,0)
M. E. 37.5, Lab. ----- $\frac{3}{4}$	(0,2)
Military Science 31 -----1	(0,3)
Physics 33, Astronomy -----2	(2,0)

17 $\frac{1}{2}$

Second Semester

C. E. 32, Mech. of Materials---3	(3,0)
C. E. 34, Graphic Statics -----1 $\frac{3}{4}$	(1,2)
C. E. 36, Struct. Design -----1 $\frac{1}{4}$	(0,4)
Econ. & Soc. 41, Economics ---2	(2,0)
English 32, Business Law -----2	(2,0)
Geology 31, Engineering -----2	(2,0)
M. E. 38, Mech. Engr. -----3	(3,0)
M. E. 38.5, Lab. ----- $\frac{3}{4}$	(0,2)
Military Science 32 -----1	(0,3)

16 $\frac{3}{4}$

SENIOR YEAR

C. E. 41, Roads & Pavements---3	(3,0)
C. E. 43, Road Mat. & Test. _1	(0,3)
C. E. 45, Reinf. Concrete -----2 $\frac{3}{4}$	(2,2)
C. E. 49, Hydraulics -----3	(3,0)
C. E. 51, Thesis ----- $\frac{3}{4}$	(0,2)
E. E. 51, Elements of E. E. --2 $\frac{3}{4}$	(2,2)
Military Science 41 -----1	(0,3)

14

C. E. 40, Bridge Design -----4	(2,6)
C. E. 42, Road Lab. -----1	(0,3)
C. E. 44, Water Supply -----2	(2,0)
C. E. 46, Sewerage -----3	(3,0)
C. E. 48, Engr. Investigation -- $\frac{3}{4}$	(0,2)
C. E. 50, Thesis ----- $\frac{3}{4}$	(0,2)
Econ. & Soc. 42, Soc. -----2	(2,0)
Military Science 42 -----1	(0,3)

14 $\frac{1}{2}$

4c.—ELECTRICAL ENGINEERING

Electrical engineering is developing so rapidly and is being applied in such widely different fields that it is impossible for any college course to cover it adequately. There are, however, certain fundamental laws which underlie all the important applications of electricity. In the careful study of these laws and a few of the more fundamental applications, this course attempts to lay the foundation on which the student may rapidly build his professional career in any branch of electrical engineering.

The course includes the study of those subjects which form a necessary foundation for the study of electrical theory and practice; sufficient drawing and shop work to develop the co-ordination between mind and hand, and at the same time give the student some idea of the possibilities of engineering materials; and other subjects which broaden his intellectual growth. He is encouraged to take an interest in public affairs, to give time to more extensive and diversified reading, and to enter into various student activities.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	3/4	(0,2)
Drawing 13, Mechanical	3/4	(0,2)
English 11, Comp. and Am. Lit.	2	(2,0)
History 13, Political Sci.	2	(2,0)
Library 11, How to Use	R	
Math. 11, Trigonometry	5	(5,0)
M. E. 13, or M. E. 17	1 1/2	(0,4)
Military Science 11	1	(0,3)
Phys. Ed. 11	3/4	(0,2)
Physics 11, General	4	(3,2)

 17 1/4
Second Semester

Drawing 12, Freehand	3/4	(0,2)
Drawing 14, Mechanical	3/4	(0,2)
English 12, Comp. & Am. Lit.	2	(2,0)
History 14, Am. Ec. Hist.	2	(2,0)
Math. 12, Analytics	5	(5,0)
M. E. 14, or M. E. 18	1 1/2	(0,4)
Military Science 12	1 3/4	(1,2)
Phys. Ed. 12	3/4	(0,2)
Physics 12, General	4	(3,2)

 18

SOPHOMORE YEAR

Chem. 11, General	3 3/4	(3,2)
Drawing 25, Mechanical	3/4	(0,2)
C. E. 23, Surveying	1 3/4	(1,2)
English 21, Lit. & Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)
M. E. 21, or M. E. 22	3/4	(0,2)
Military Science 21	1	(0,3)
Physics 21, Mechan. & Light	3	(3,0)
Physics 23, Lab.	1	(0,2)

 18 3/4

Chem. 12, General	3 3/4	(3,2)
Drawing 28, Mechanical	3/4	(0,2)
Econ. & Soc. 41, Econ.	2	(2,0)
English 22, Lit. & Adv. Comp.	2	(2,0)
Math. 22, Int. Calculus	5	(5,0)
M. E. 22, or M. E. 21	3/4	(0,2)
Military Science 22	1 3/4	(1,2)
Physics 22, Elec. & Mag.	3	(3,0)
Physics 24, Lab.	1	(0,2)

 19 3/4

JUNIOR YEAR

Drawing 31, Machine Design	1	(0,3)
E. E. 31, D. C. Machinery	5	(5,0)
E. E. 33, Elec. Measurements	1	(0,3)
M. E. 31, Mechanics	3	(3,0)
M. E. 33, Machine Shop	1 1/2	(0,4)
M. E. 35, Mech. Engr.	3	(3,0)
M. E. 39, Mech. Lab.	3/4	(0,2)
Military Science 33	1	(0,3)

 16

Drawing 32, Mach. Design	1	(0,3)
E. E. 32, A. C. Circuits	5	(5,0)
E. E. 34, Elec. Measurements	1	(0,3)
M. E. 40, Mech. Lab.	3/4	(0,2)
M. E. 32, Mechanics	3	(3,0)
M. E. 34.5, Machine Shop	1 1/2	(0,4)
M. E. 36, Mech. Engr.	3	(3,0)
Military Science 34	1	(0,3)

 16

SENIOR YEAR

E. E. 41, A. C. Machinery	3	(3,0)
E. E. 43, Elec. Circuits	2	(2,0)
E. E. 45, Dynamo Lab.	1 1/2	(0,4)
E. E. 47, Elec. Design	3/4	(0,2)
Eng. 31, Pub. Speaking	2	(2,0)
M. E. 41, Mech. Engr.	3	(3,0)
M. E. 45, Mech. Lab.	3/4	(0,2)
M. E. 51, Mech. of Mat.	3	(3,0)
Military Science 41	1	(0,3)

 16 3/4

C. E. 52, Hydraulics	2	(2,0)
E. E. 42, A. C. Machinery	3	(3,0)
E. E. 44, Power Trans.	2	(2,0)
E. E. 46, Dynamo Lab.	1 1/2	(0,4)
E. E. 48, Elec. Design	3/4	(0,2)
Econ. & Soc. 42, Soc.	2	(2,0)
English 32, Business Law	2	(2,0)
Military Science 42	1	(0,3)

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4d.—MECHANICAL ENGINEERING

The course in mechanical engineering is designed to give the graduate as broad a training as possible and to fit him for some specific type of work.

It embraces practically all forms of engineering which have for their objects the application of the forces of nature to the accomplishment of the processes of industry. The course is designed to give an intimate knowledge of the materials used in engineering, the laws of mechanics and the characteristics of various types of machinery.

The shop courses embrace wood work, forge work, foundry and machine work. The purpose of this instruction is not to turn out skilled workmen but to train those faculties of mind which can best be reached through the work of the hand, and to give the student a clear knowledge of the characteristics and possibilities of the materials used in engineering.

Considerable time is given to the study of the laws of the physical sciences, in such subjects as physics, chemistry, mechanics, electricity and magnetism and thermodynamics.

During the fourth year stress is laid on the application of the fundamental principles already covered so that the graduate may be able to design or manage those types of machines which ordinarily come under the supervision of the mechanical engineer.

The mechanical engineer should have a liberal education; therefore, in addition to the regular technical work, comprehensive training is given in English, history, economics, civics and related subjects.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 13, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 11, Comp. & Lit.	-----	2	(2,0)
History 13, Pol. Science	-----	2	(2,0)
Library 11, How to Use	-----	R	
Math. 11, Trigonometry	-----	5	(5,0)
M. E. 13, or M. E. 17	-----	$1\frac{1}{3}$	(0,4)
Military Science 11	-----	1	(0,3)
Phys. Ed. 11	-----	$\frac{2}{3}$	(0,2)
Physics 11, General	-----	4	(3,2)

 17 $\frac{1}{3}$
Second Semester

Drawing 12, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 14, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 12, Comp. & Lit.	-----	2	(2,0)
History 14, Am. Ec.	-----	2	(2,0)
Math. 12, Analytics	-----	5	(5,0)
M. E. 14, or M. E. 18	-----	$1\frac{1}{3}$	(0,4)
Military Science 12	-----	$1\frac{2}{3}$	(1,2)
Phys. Ed. 12	-----	$\frac{2}{3}$	(0,2)
Physics 12, General	-----	4	(3,2)

 18

SOPHOMORE YEAR

C. E. 23, Surveying	-----	$1\frac{2}{3}$	(1,2)
Chem. 11, General	-----	$3\frac{2}{3}$	(3,2)
Drawing 25, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 21, Lit. & Adv. Comp.	-----	2	(2,0)
Math. 21, Dif. Calculus	-----	5	(5,0)
M. E. 21, or M. E. 22	-----	$\frac{2}{3}$	(0,2)
Military Science 21	-----	1	(0,3)
Physics 21	-----	3	(3,0)
Physics 23, Lab.	-----	1	(0,2)

 18 $\frac{2}{3}$

Chem. 12, General	-----	$3\frac{2}{3}$	(3,2)
Drawing 28, Mechanical	-----	$\frac{2}{3}$	(0,2)
Econ. & Soc. 42, Econ.	-----	2	(2,0)
English 22, Lit. & Adv. Comp.	-----	2	(2,0)
Math. 22, Int. Calculus	-----	5	(5,0)
M. E. 22, or M. E. 21	-----	$\frac{2}{3}$	(0,2)
Military Science 22	-----	$1\frac{2}{3}$	(1,2)
Physics 22	-----	3	(3,0)
Physics 24, Lab.	-----	1	(0,2)

 19 $\frac{2}{3}$

JUNIOR YEAR

Drawing 31, Machine Design	___	1	(0,3)
E. E. 31, D. C. Machinery	___	5	(5,0)
E. E. 33, Elec. Measurement	___	1	(0,3)
M. E. 31, Mechanics	-----	3	(3,0)
M. E. 33, Machine Shop	-----	$1\frac{1}{3}$	(0,4)
M. E. 35, Mech. Engr.	-----	3	(3,0)
M. E. 39, Lab.	-----	$\frac{2}{3}$	(0,2)
Military Science 31	-----	1	(0,3)

 16

Drawing 32, Mach. Design	___	1	(0,3)
E. E. 32, A. C. Machinery	___	5	(5,0)
E. E. 34, Elec. Measurement	___	1	(0,3)
M. E. 40, Mech. Lab.	-----	$\frac{2}{3}$	(0,2)
M. E. 32, Mechanics	-----	3	(3,0)
M. E. 34, Mach. Shop	-----	$1\frac{1}{3}$	(0,4)
M. E. 36, Mech. Engr.	-----	3	(3,0)
Military Science 32	-----	1	(0,3)

 16

SENIOR YEAR

E. E. 35, Dynamo Lab.	-----	$\frac{2}{3}$	(0,2)
E. E. 53, A. C. Machinery	___	3	(3,0)
English 31, Public Speaking	___	2	(2,0)
M. E. 43, Mech. Lab.	-----	$1\frac{1}{3}$	(0,4)
M. E. 47, Power Plants	-----	3	(3,0)
M. E. 49, Heat & Ventilation	___	2	(2,0)
M. E. 53, Design	-----	$\frac{2}{3}$	(0,2)
M. E. 51, Mech. of Materials	___	3	(3,0)
Military Science 41	-----	1	(0,3)

 16 $\frac{2}{3}$

C. E. 52, Hydraulics	-----	2	(2,0)
E. E. 36, Dynamo Lab.	-----	$\frac{2}{3}$	(0,2)
Econ. & Soc. 42, Soc.	-----	2	(2,0)
English 32, Business Law	___	2	(2,0)
M. E. 48, Power Plants	-----	3	(3,0)
M. E. 44, Mech. Lab.	-----	$1\frac{1}{3}$	(0,4)
M. E. 46, Gas Engines	-----	2	(2,0)
M. E. 54, Design	-----	$\frac{2}{3}$	(0,2)
Military Science 42	-----	1	(0,3)

 14 $\frac{2}{3}$

5.—TEXTILES

5a.—TEXTILE ENGINEERING

The course in textiles is designed to give the student sound training, both theoretical and practical, in the sciences upon which manufacturing processes are based. In formulating the curriculum the several phases of the textile industry were considered. Successful practice in the industry is dependent upon the understanding of these principles and their practical application.

The first year of the course introduces the student to the textile industry and gives some instruction in certain of its phases and at the same time gives him fundamental engineering subjects as well as those of general educational value. The practical work is carried on for the purpose of developing in the student habits of accurate observation and some skill in manipulation, supplementing the theoretical work. In this work special consideration is given to economy of time, precision of results, and attention to details, as well as to methods of fundamental importance.

This course does not necessarily fit one for immediate entrance to an executive position in a mill, but the graduate is in possession of such information, and has acquired such knowledge and experience that he may look forward to a successful career provided he has the necessary energy, application, and tact.

Students who take this course are encouraged to work in the industry during their vacation periods. Every one is required to work at least four weeks between the freshman and sophomore years and at least four weeks between the sophomore and junior years in a textile plant. Students who have had experience acceptable to the head of the textile department may be excused from this requirement.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 13, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 11, Comp. & Am. Lit.	---2		(2,0)
History 13, Polit. Sci	-----2		(2,0)
Library 11, How to Use	-----R		
Math. 11, Trigonometry	-----5		(5,0)
M. E. 17, or M. E. 14	-----	$\frac{2}{3}$	(0,2)
Military Science 11	-----1		(0,3)
Phys. Ed. 11	-----	$\frac{2}{3}$	(0,2)
Physics 11, General	-----4		(3,2)
Yarn Mfg. 11, Textiles	-----1	$\frac{2}{3}$	(1,2)

 18 $\frac{1}{3}$
Second Semester

Drawing 12, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 14, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 12, Comp. & Am. Lit.	---2		(2,0)
History 14, Am. Ec. Hist.	-----2		(2,0)
Math. 12, Analytics	-----5		(5,0)
M. E. 14, or M. E. 17	-----	$\frac{2}{3}$	(0,2)
Military Science 12	-----1		(0,3)
Phys. Ed. 12	-----	$\frac{2}{3}$	(0,2)
Physics 12, General	-----4		(3,2)
T. F. 12, Textiles	-----1	$\frac{2}{3}$	(1,2)

 18 $\frac{1}{3}$

Summer Work -----4 weeks

SOPHOMORE YEAR

Chemistry 11, General	-----	3 $\frac{2}{3}$	(3,2)
Drawing 25, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 21, Lit. & Adv. Comp.	---2		(2,0)
Math. 21, Dif. Calculus	-----5		(5,0)
M. E. 33.5, Machine Shop	-----1	$\frac{1}{3}$	(0,4)
Military Science 21	-----1		(0,3)
T. F. 21, Fabric Const.	-----2		(2,0)
T. F. 23, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 21, Pickers	-----2	$\frac{2}{3}$	(2,2)

 19

Chem. 12, General	-----	3 $\frac{2}{3}$	(3,2)
Drawing 28, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 22, Lit. & Adv. Comp.	---2		(2,0)
Math. 22, Int. Calculus	-----5		(5,0)
M. E. 34.5, Machine Shop	-----1	$\frac{1}{3}$	(0,4)
Military Science 22	-----1		(0,3)
T. F. 22, Elem. Design	-----2		(2,0)
T. F. 24, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 22, Cards and Drawing Frames	-----	2 $\frac{2}{3}$	(2,2)

 19

Summer Work -----4 weeks

JUNIOR YEAR

Chem. 31, Textile	-----	2 $\frac{2}{3}$	(2,2)
M. E. 31, Mechanics	-----3		(3,0)
M. E. 37, Mech. Eng	-----3		(3,0)
M. E. 37.5, Mech. Eng. Lab.	---	$\frac{2}{3}$	(0,2)
Military Science 31	-----1		(0,3)
T. F. 31, Design	-----2		(2,0)
T. F. 33, Fabric Analysis	-----	$\frac{2}{3}$	(0,2)
T. F. 35, Weaving	-----1	$\frac{2}{3}$	(1,2)
Yarn Mfg. 31, Roving Frames	-----2	$\frac{2}{3}$	(2,2)

 17 $\frac{1}{3}$

Chem. 32, Textile	-----	2 $\frac{2}{3}$	(2,2)
E. E. 30, Elec. Eng.	-----	2 $\frac{2}{3}$	(2,2)
M. E. 28, Mech. Eng.	-----3		(3,0)
M. E. 32, Mechanics	-----3		(3,0)
M. E. 38.5, Mech. Eng. Lab.	---	$\frac{2}{3}$	(0,2)
Military Science 32	-----1		(0,3)
T. F. 34, Fabric Analysis	-----	$\frac{2}{3}$	(0,2)
T. F. 36, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 32, Cotton Grading	-----2	$\frac{2}{3}$	(2,2)

 17

This curriculum is subject to change with the approval of the President.

SENIOR YEAR

First Semester

Chem. 41, Textile	2 $\frac{2}{3}$	(2,2)
Econ. & Soc. 41, Econ.	2	(2,0)
Eng. 31, Public Speaking	2	(2,0)
Military Science 41	1	(0,3)
T. F. 41, Design	2	(2,0)
T. F. 43, Weave Methods	3	(3,0)
T. F. 45, Weaving	$\frac{2}{3}$	(0,2)
Yarn Mfg. 41, Spinning	3 $\frac{2}{3}$	(3,2)

17

Second Semester

Chem. 42, Dyeing	1 $\frac{1}{3}$	(0,4)
Econ. & Soc. 42, Sociology	2	(2,0)
English 32, Business Law	2	(2,0)
Y. M. 44, Mill Econ.	2	(2,0)
Military Science 42	1	(0,3)
T. F. 42, Jacquard Design	3 $\frac{1}{3}$	(2,4)
T. F. 46, Weaving	$\frac{2}{3}$	(0,2)
T. F. 48, Knitting	$\frac{2}{3}$	(0,2)
Yarn Mfg. 42, Combers	1 $\frac{2}{3}$	(1,2)

14 $\frac{2}{3}$

5b.—INDUSTRIAL EDUCATION

By the enactment of the Smith-Hughes law for the promotion of vocational education, Congress has provided funds for encouraging and assisting in the development of instruction throughout the country in agriculture, home economics, and trades and industries.

The demand for men to serve as teachers of shop subjects, manual training, mechanical drawing, related shop subjects, home mechanics and manual arts, as well as local supervisors in industrial communities, has been responsible for the inauguration of this course. Men who complete this course have the professional qualifications to meet the standards of vocational teachers. Students who take this course should have experience in a trade before entering and are encouraged to secure industrial employment during their vacation. Machine shops, garages, construction work, electrical work and other such trades offer opportunities for this practical experience.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	$\frac{2}{3}$	(0,2)
Drawing 13, Mech.	$\frac{2}{3}$	(0,2)
English 11, Comp. & Lit.	2	(2,0)
History 13, Pol. Science	2	(2,0)
Library 11, How to Use	R	
Math. 11 (Trig.)	5	(5,0)
M. E. 13, or M. E. 17	1 $\frac{1}{3}$	(0,4)
Military Science 11	1	(0,3)
Phys. Ed. 11	$\frac{2}{3}$	(0,2)
Physics 11	4	(3,2)

17 $\frac{1}{3}$

Second Semester

Drawing 12, Freehand	$\frac{2}{3}$	(0,2)
Drawing 14, Mech.	$\frac{2}{3}$	(0,2)
English 12, Comp. & Lit.	2	(2,0)
History 14, Am. Ec.	2	(2,0)
Math. 12, (Anal.)	5	(5,0)
M. E. 14, or M. E. 18	1 $\frac{1}{3}$	(0,4)
Military Science 12	1 $\frac{2}{3}$	(1,2)
Phys. Ed. 12	$\frac{2}{3}$	(0,2)
Physics 12	4	(3,2)

18

SOPHOMORE YEAR

First Semester

Chem. 11, General	3½	(3,2)
C. E. 21, Surveying	1½	(1,2)
Drawing 25, Mechanical	¾	(0,2)
English 21, Lit. & Adv. Comp.	2	(2,0)
Math. 21, Dif. Calculus	5	(5,0)
M. E. 21, or M. E. 22	¾	(0,2)
Military Science 21	1	(0,3)
Physics 21-23	4	(3,2)

18½

Second Semester

Chem. 12, General	3½	(3,2)
Drawing 28, Mechanical	¾	(0,2)
Econ. & Soc. 41, Econ.	2	(2,0)
English 22, Lit. & Adv. Comp.	2	(2,0)
Math. 22, Int. Calculus	5	(5,0)
M. E. 22, or M. E. 21	¾	(0,2)
Military Science 22	1½	(1,2)
Physics 22-24	4	(3,2)

19½

JUNIOR YEAR

English 31, Pub. Speak.	2	(2,0)
Ind. Ed. 33, Introduction to Ind. Ed.	2½	(1,4)
Geol. 31, Engineering	2	(2,0)
M. E. 31, Mechanics	3	(3,0)
M. E. 33.5, Mach. Shop	1½	(0,4)
M. E. 31.5, Indus. Arts	¾	(0,2)
Military Science 31	1	(0,3)
Eng. 32, Bus. Law	2	(2,0)
Ind. Ed. 32, Educational Psychology	3	(2,3)
M. E. 32, Mechanics	3	(3,0)
M. E. 32.5, Indus. Arts	¾	(0,2)
M. E. 34.5, Machine Shop	1½	(0,4)
Military Science 32	1	(0,3)
Physics 33, Astronomy	2	(2,0)

12½

13

SENIOR YEAR

C. E. 32, Mech. of Mat.	3	(3,0)
Ind. Ed. 43	3½	(0,10)
E. E. 30, Elec. Machinery	2½	(2,2)
Military Science 41	1	(0,3)
Ind. Ed. 44, Meth. Teach. Ind. Sub.	3	(3,0)
Ind. Ed. 46, Prac. Teaching	5	(0,15)
Econ. & Soc. 42, Soc.	2	(2,0)
Military Science 42	1	(0,3)

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11

5c.—INDUSTRIAL EDUCATION, TEXTILE

This course has for its purpose the preparation of young men for positions of usefulness and responsibility in vocational departments of schools located in textile communities. The course includes instruction in the fundamental principles of education, of engineering, and of the textile industry.

The prime purpose of the course is to prepare for positions as teachers of trade and industrial subjects as such and as principals of schools in mill communities as well as local supervisors of industrial education. As the textile industry is the dominant one in the state, that industry is given special prominence. The course is essentially a combination of instruction in the textile industry and the training of industrial teachers.

FRESHMAN YEAR

First Semester

Drawing 11, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 13, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 11, Comp. and Am. Lit.	2		(2,0)
History 13, Polit. Science	2		(2,0)
Library 11, How to Use	R		
Math. 11, Trigonometry	5		(5,0)
M. E. 17, or M. E. 14	-----	$\frac{2}{3}$	(0,2)
Military Science 11	-----	1	(0,3)
Phys. Ed. 11	-----	$\frac{2}{3}$	(0,2)
Physics 11, General	-----	4	(3,2)
Yarn Mfg. 11, Textiles	-----	$1\frac{2}{3}$	(1,2)

18 $\frac{1}{3}$

Second Semester

Drawing 12, Freehand	-----	$\frac{2}{3}$	(0,2)
Drawing 14, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 12, Comp. & Am. Lit.	2		(2,0)
History 14, Am. Ec. Hist.	2		(2,0)
Math. 12, Analytics	-----	5	(5,0)
M. E. 14, or M. E. 17	-----	$\frac{2}{3}$	(0,2)
Military Science 12	-----	$1\frac{2}{3}$	(1,2)
Phys. Ed. 12	-----	$\frac{2}{3}$	(0,2)
Physics 12, General	-----	4	(3,2)
T. F. 12, Textiles	-----	$1\frac{2}{3}$	(1,2)

19

Summer Work -----4 weeks

SOPHOMORE YEAR

Chemistry 11, General	-----	$3\frac{2}{3}$	(3,2)
Drawing 25, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 21, Lit. & Adv. Comp.	2		(2,0)
M. E. 33.5, Machine Shop	-----	$1\frac{1}{3}$	(0,4)
Math. 21, Dif. Calculus	-----	5	(5,0)
Military Science 21	-----	1	(0,3)
T. F. 21, Fabric Const.	-----	2	(2,0)
T. F. 23, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 21, Pickers	-----	$2\frac{2}{3}$	(2,2)

19

Chem. 12, General	-----	$3\frac{2}{3}$	(3,2)
Drawing 28, Mechanical	-----	$\frac{2}{3}$	(0,2)
English 22, Lit. & Adv. Comp.	2		(2,0)
Math. 22, Int. Calculus	-----	5	(5,0)
M. E. 34.5, Machine Shop	-----	$1\frac{1}{3}$	(0,4)
Military Science 22	-----	1	(0,3)
T. F. 22, Elem. Design	-----	2	(2,0)
T. F. 24, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 22, Cards and Drawing Frames	-----	$2\frac{2}{3}$	(2,2)

19

Summer Work -----4 weeks

JUNIOR YEAR

English 31	-----	2	(2,0)
Ind. Ed. 33, Introduction	-----	3	(1,4)
Military Science 31	-----	1	(0,3)
T. F. 31, Dobby Design	-----	2	(2,0)
T. F. 33, Fabric Analysis	-----	$\frac{2}{3}$	(0,2)
T. F. 35, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 31	-----	$2\frac{2}{3}$	(2,2)
Yarn Mfg. 41, Spinning	-----	$2\frac{2}{3}$	(2,2)

14 $\frac{2}{3}$

English 32	-----	2	(2,0)
Ind. Ed. 32, Ed. Psych.	-----	3	(2,3)
M. E. 38, Mech. Eng.	-----	$3\frac{2}{3}$	(3,2)
Military Science 32	-----	1	(0,3)
T. F. 32, Fabric Analysis	-----	$\frac{2}{3}$	(0,2)
T. F. 36, Weaving	-----	$\frac{2}{3}$	(0,2)
Yarn Mfg. 32	-----	$2\frac{2}{3}$	(2,2)
Yarn Mfg. 42, Combers	-----	$1\frac{2}{3}$	(1,2)

15 $\frac{1}{3}$

SENIOR YEAR

Econ. & Soc. 41, Econ.	-----	2	(2,0)
Ind. Ed. 43, Industrial	-----	$3\frac{2}{3}$	(0,10)
Military Science 41	-----	1	(0,3)
T. F. 41, Tech. Fab.	-----	2	(2,0)
T. F. 43, Weave Meth.	-----	3	(3,0)

11 $\frac{1}{3}$

Econ. & Soc. 42, Soc.	-----	2	(2,0)
Ind. Ed. 44, Industrial	-----	3	(3,0)
Ind. Ed. 46, Practice Teaching	5		(0,15)
Military Science 42	-----	1	(0,3)
T. F. 44, Mill Econ.	-----	2	(2,0)

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DESCRIPTION OF COURSES

AGRONOMY

MR. BUIE

MR. McALISTER

MR. COLLINGS

Agr. 11.—Field Crops—Semester 1 (3 and 0) 3 cr.

A course dealing with the history, origin, botanical characteristics, physiology, ecology, varieties, breeding, soil adaptation, fertilizer requirements, and the cultural methods of the most important crops of the United States.

Text-book: *Production of Field Crops*—Hutchinson and Wolfe.

MR. COLLINGS

Agr. 20.—Soils—Semester 2 (2 and 2) 2 2/3 cr.

A fundamental course in soils, intended to cover the basic principles of soil physics, soil fertility, soil biology, and soil management. It deals with the soil as a reservoir for water, as a medium for root development, as a source of nutrients, and as a home of organisms.

A laboratory course dealing almost exclusively with the physical properties of the soil is also given.

Text-book: *The Nature and Properties of Soils*—Lyon and Buckman.

MR. COLLINGS

Agr. 21.—Farm Machinery—Semester 1 (2 and 2) 2 2/3 cr.

A course dealing with the use of machinery in the production of farm crops. Studies are made of the design, construction, adjustments and operation of the latest improved field and belt machinery. Laboratory work consists of a detail study and testing of the more common farm machines. Field studies are made when conditions permit.

Text-book: *Equipment for the Farm and Farmation*—Ramsower.

MR. McALISTER

Agr. 30.—Forage Crops—Semester 2 (3 and 0) 3 cr.

A course dealing with the characteristics of the various forage crops, with emphasis being laid on those grown in this state. These crops are studied with special reference to their adaptations, growing, harvesting, composition, value and uses, and also with reference to their place in our cropping system.

Text-book: *Forage Crops and Their Culture*—Piper.

MR. COLLINGS

Agr. 31.—Fertilizers and Manures—Semester 1 (2 and 0) 2 cr.

A study of the sources, composition, physical characteristics and uses of fertilizers and manures.

Text-book: *Manures and Fertilizers*—Wheeler.

MR. COLLINGS

Agr. 32.—Genetics—Semester 2 (2 and 2) 2 2/3 cr.

A course dealing with the laws of heredity and equally applicable to plants and animals.

Text-book: *Principles of Genetics*—Sinnott and Dunn.

MR. BUTE

Agr. 41.—Advanced Cotton—Semester 1 (2 and 0) 2 cr.

Prerequisite—Agronomy 11.

An advanced course in cotton dealing with all phases of cotton production.

Text-book: *The Production of Cotton*—Collings.

MR. COLLINGS

Agr. 42.—Soil Fertility and Management—Semester 2 (2 and 0) 2 cr.

A course dealing with the composition of the soil and the influence of crop rotations and fertilizers on the productivity of the soil as shown by field experiments. This course also includes a study of home mixing of fertilizers and the application of

commercial plant foods and of lime in agricultural practice. Special attention is directed toward those factors essential for the practical utilization of South Carolina soils.

Text-book: *Soil Management*—Bear.

MR. COLLINGS

Agr. 44.—Advanced Soils—Semester 2 (0 and 2) 2/3 cr.

A laboratory course dealing with the chemical and physical determinations of the properties of South Carolina soils.

Text-book: *Soil Characteristics*—Emerson.

MR. COLLINGS

Agr. 45.—Advanced Crops—Semester 1 (2 and 0) 2 cr.

Prerequisite: Agronomy 11, 30, 32 and 41.

A general course dealing with crops. Particular emphasis is laid upon the production of crops in the southeastern part of the United States.

Text-books: *The Small Grains*—Charleton. *The Corn Crops*—Montgomery.

MR. BUIE

Agr. 46.—Farm Buildings—Semester 2 (2 and 2) 2 2/3 cr.

A course designed to assist students in the planning and arrangement of farm buildings, including the farm home. Lectures and laboratory work are devoted to the arrangement of the farm building lay-out, the design, plan and cost estimation of the major farm buildings.

Text-book: *Farm Buildings*—Foster and Carter.

MR. McALISTER

Agr. 47.—Advanced Crop Laboratory—Semester 1 (0 and 2) 2/3 cr.

A course intended primarily for students specializing in agronomy. It includes a morphological study of cotton,

corn, small grains and forage crops. Special attention is given to the identification and germination of seeds.

Text-book: *First Book of Grasses*—Chase.

MR. BUIE

Agr. 49.—Plant Breeding—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Agronomy 32.

A study of methods of improving field crops by breeding. All of the common field crops are included and special emphasis is placed on the cotton, corn, tobacco, small grains and forage plants.

Text-book: *Breeding Crop Plants*—Hays and Garber.

MR. BUIE

Agr. 50.—Soil Problems—Semester 2 (1 and 0) 1 cr.

A course with a review and discussion of the latest published information concerning recent developments in the field of soil science.

Text-book: Bulletins, reports and professional magazines will be assigned as references.

MR. COLLINGS

Agr. 51.—Crop Problems—Semester 1 (1 and 0) 1 cr.

A course giving a review and discussion of the latest published information concerning the production of field crops.

Text-book: Bulletins, reports and professional magazines will be assigned as references.

MR. BUIE

Agr. 53.—Agricultural Surveying and Drainage—Semester 1 (2 and 2) 2 2/3 cr.

A survey of small areas with tape, level and rod, computing areas, topographic mapping, design and study of drainage system; prevention of soil erosion with special emphasis on terracing.

MR. McALISTER

Agr. 55.—Farm Shop—Semester 1 (1 and 2) 1 2/3 cr.

A course designed especially for agricultural educational seniors to meet local needs, as planning and equipping farm shop building, constructing small items of farm equipment from wood, metal and concrete, making simple repairs.

MR. McALISTER

Agr. 57.—Farm Motors—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Agronomy 21.

A study of power as applied to agricultural operations through the various forms of farm motors, such as gas engines, tractors, water wheels and electric motors.

MR. McALISTER

AGRICULTURAL ECONOMICS

MR. JENSEN

MR. MILLS

MR. CARKUFF

Ag. Ec. 12.—Elementary Agricultural Economics—Semester 2 (3 and 0) 3 cr.

A course giving an introductory and elementary survey of the entire field of agricultural economics. It deals with the economic side of farming, marketing and spending from theoretical and practical viewpoints. Some of the topics stressed are—systems of farming, size of farms, the farm considered as a business enterprise, financial analysis of the farm business, cost of production, farm power, land, credit, labor, marketing cotton and other farm products, prices, economic cooperation by farmers, and the place of agriculture in national production.

Text-book: *Introduction to Agricultural Economics*—Gray.

MR. JENSEN

MR. MILLS

Ag. Ec. 31.—Farm Management—Semester 1 (2 and 2)
2 2/3 cr.

A course dealing chiefly with farm organization or management; types of farming and the economic, physical and biological

factors determining them; selection of farm enterprises for highest profits; physical and financial organization of farms and their operation in areas representative of the important types.

Text-book: *The Management of the Farm*—Moorehouse.

MR. CARKUFF

Ag. Ec. 32—Price Economics—Semester 2 (2 and 2) 2 2/3 cr.

A study of prices as related to successful farming; price levels, cycles and trends as they influence or determine farm programs and individual farm operations; treatment of prices of farm products, production goods and commodities purchased for the farm family; fundamental relations of prices to booms, depressions and normal times.

Text-book: *The Agricultural Situation* — Warren and Pearson.

MR. JENSEN

Ag. Ec. 34.—Farm Accounting—Semester 2 (1 and 4) 2 1/3 cr.

A course applying cost accounting and bookkeeping principles and methods to farms and farm enterprises; including a study of special records and special accounts peculiar to farm costs, such as man labor and mule labor records; field, crop and livestock accounts; the preparation of detailed cost statements; use of cost schedules for determining the profit or loss from individual farm operations; workable cost systems and their analysis in relation to farm management. Farm surveys and farm cost accounts are analyzed and compared.

Text-book: *Farm Accounting—Principles and Problems*—McMurray and McNall.

MR. JENSEN MR. MILLS

Ag. Ec. 40.—Rural Sociology—Semester 2 (2 and 2) 2 2/3 cr.

The social problems of rural living.

Text-book: *Rural Sociology*—C. C. Taylor.

MR. MILLS

Ag. Ec. 41.—Advanced Agricultural Economics—Semester 1
(3 and 0) 3 cr.

An advanced course on the broader problems of agricultural economics with special application to South Carolina. Some of the important topics are—selecting and combining factors of production; diminishing returns on farms; theories of rent, interest, wages and profits; taxation; tariffs; credit; and critical estimates of policies proposed for agriculture.

Text-book: *Outlines of Agricultural Economics*—H. C. Taylor.

MR. JENSEN

Ag. Ec. 42.—Rural Cooperation—Semester 2 (3 and 0) 3 cr.

Principles and practices of cooperative marketing.

Text-book: *Principles and Practices of Cooperative Marketing*.—Meares and Tabriner.

MR. MILLS

Ag. Ec. 43.—Marketing—Semester 1 (2 and 2) 2 2/3 cr.

A course dealing with the principles of marketing, commodity marketing and marketing programs; marketing services; market mechanism; market grades and standardization; storage and warehousing; transportation; future trading; inspection and grading of perishable and staple products. Films on marketing and field studies will be given in laboratory.

Text-book: *Marketing of Agricultural Products*—Boyle.

MR. CARKUFF

Ag. Ec. 45.—Statistical Methods—Semester 1 (1 and 2)
1 2/3 cr.

A course on the meaning and application of statistical methods which will train students in making correct economic and statistical studies. Some of the important topics are laws of sampling, laws of averages, dispersion, variation, table construction, graphic presentation and correlation.

Text-book: *Statistical Method*—Jerome.

MR. JENSEN

Ag. Ec. 50.—Special Problems—Semester 2 (1 and 0) 1 cr.

Discussion of special problems in the field of agricultural economics, or thesis or report prepared from local economic data under supervision.

MR. JENSEN

Ag. Ec. 52.—Bible—Semester 2 (1 and 0)

The Bible is studied (a) as history, showing the development of the Jewish people and their relations with other nations; (b) as the rule of faith and practice, discussing its peculiar claims for itself, its ethical content, and its influence upon the world.

MR. MILLS

Teaching Facilities:

For several years the division has been carrying on economic research on a considerable scale under local South Carolina conditions. The principal groups of studies are farm management, marketing and consumption, with several projects in each group. Approximately one thousand complete farm business and cost records, in addition to a large number of special types of records and city market tabulations, are now on file in the division. This feature is a distinct teaching advantage because it gives students interesting material with which to work, and eliminates the exclusive use of text-books.

ANIMAL HUSBANDRY

MR. STARKEY

MR. RITCHIE

A. H. 12.—Farm Animals—Types, Breeds, Market Classes and Grades of Farm Animals—Semester 2 (2 and 2) 2 2/3 cr.

A course designed to give the student a knowledge of the characteristics and use of the various types of farm animals; the history, methods of improvement, and characteristics of the leading breeds; market demands and market classification of live stock.

Text-books: *Types and Market Classes of Live Stock—*Vaughan. *Types and Breeds of Farm Animals—*Plumb.

MR. RITCHIE

*A. H. 31.—Principles of Feeding—Semester 1 (2 and 2)
2 2/3 cr.*

A study of the composition of feeds, use of feeds, feed requirements and calculation of balanced rations for farm animals; classification and value of feedstuffs.

Text-book: *Feeds and Feeding*—Henry and Morrison.

MR. STARKEY

A. H. 32.—Live Stock Judging—Semester 2 (0 and 2) 2/3 cr.

A detailed study of the fundamentals of livestock judging.

MR. RITCHIE

A. H. 40.—Breeding—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Animal Husbandry 12 and Genetics.

An advanced study of breeding including the practical application of the principles of genetics to the breeding of farm animals. The course includes a discussion of the subjects of reproduction, variation, heredity, selections, line breeding, inbreeding, cross breeding, grading and other subjects correlated with the breeding and improvement of farm animals.

Text-book: *Animal Breeding*—Winters.

MR. STARKEY

MR. RITCHIE

A. H. 41.—Feeds and Feeding—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Animal Husbandry 31.

A detailed study of the composition, digestibility, use and value of different feedstuffs; an advanced study of digestion, absorption, metabolism, and functions of food nutrients, feed requirements and feeding standards.

Text-book: *Feed and Feeding*—Henry and Morrison.

MR. STARKEY

A. H. 42.—*Pork and Sheep Production*—Semester 2 (2 and 2)
2 2/3 cr.

Prerequisite: Animal Husbandry 12 and 31.

The feeding, breeding and management of sheep and swine.

Text-books: *Pork Production*—Smith. *Productive Sheep Husbandry*—Coffey.

MR. STARKEY MR. RITCHIE

A. H. 43.—*Animal Production—Horses and Mules and Beef Production*—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Animal Husbandry 12 and 31.

In this course the work is divided into two distinct units. In the first half of the semester a study of the breeding, feeding, care and management of horses and mules is taken up, and in the second, a study of the breeding, care and management of beef cattle, is followed, including a careful study of feeding and marketing methods. Textbooks supplemented by station bulletins.

Text-books: *Productive Horse Husbandry*—Gay. *Beef Cattle*—Snapp.

MR. STARKEY MR. RITCHIE

A. H. 45.—*Advanced Stock Judging and Meats*—Semester 1
(2 and 2) 2 2/3 cr.

A course in the judging of breeding animals and fat stock, and in the slaughtering, cutting, and curing of meats, and the preparation of by-products.

Text-books: *Judging Farm Animals*—Plumb. *Meat and Meat Products*—Tomhave.

MR. RITCHIE

ARCHITECTURE

MR. LEE

MR. HARTELL

MR. SCHUHOLZ

MR. HODGE

Arch. 11.—Elements of Architecture—Semester 1 (0 and 4)
1 1/3 cr.

Exercises in brush work and studies of architectural elements, walls, openings, the Orders, vaults, etc., treated with reference to their employment in design. Lettering.

MR. SCHUHOLZ

Arch. 12.—Architectural Design—Semester 2 (0 and 4) 1 1/3 cr.

Continuation of 11. Problems in elementary design involving the use of the elements.

MR. SCHUHOLZ

Arch. 13-14.—Freehand Drawing—Semester 1 (0 and 2) 2/3 cr.
Semester 2 (0 and 4) 1 1/3 cr.

A course covering angular and parallel perspective, the perspective of circles and shading.

The study of pencil technique is stressed for sketching purposes and charcoal work from the cast is given in order to develop a correct sense of values, form and proportion.

MR. HODGE

Arch. 15.—Descriptive Geometry—Semester 1 (0 and 2) 2/3 cr.

Fundamental problems in descriptive geometry are studied and applied to the solution of problems in architecture, leading particularly to the casting of shadows.

MR. KLUGH

Arch. 16.—Shades and Shadows and Perspective—Semester 2
(0 and 2) 2/3 cr.

Problems in the casting of conventional shadows of architectural forms and the theory and practice of architectural perspective are solved.

MR. SCHUHOLZ

*Arch. 21-22.—Architectural Design—*Semesters 1 and 2
(0 and 14) 4 2/3 cr.

Prerequisite: Arch. 12, 14, 15, 16.

A series of simple problems in design, applying classic proportions to modern buildings; criticism, sketch problems, beaux-arts problems; rendering in water color and other mediums.

Architectural library reference books and plates.

MR. SCHUHOLZ MR. HARTELL

*Arch. 23-24.—Cast Drawing—*Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Arch. 14.

Thorough drill in drawing groups of simple casts of architectural fragments and parts of the figure, in pencil, pen and ink, and charcoal rendering; study of color in theory and practice; water color sketching and out-of-door sketching.

MR. HODGE

*Arch 25-26.—History of Architecture—*Semesters 1 and 2
(3 and 0) 3 cr.

Study of historic styles and monuments of architecture, classic, mediaeval and Renaissance. This subject is given by illustrated lectures and text-book. The student is required to do research work in the library and to make sketches.

MR. HARTELL

*Arch. 28.—Summer Work—*8 weeks.

Each student in architecture is required to spend eight weeks of the summers employed in an architect's office, or on a large building construction project, or he may be required to make a measured drawing of some designated building of good architectural character. If he has had sufficient experience along these lines he may be excused from summer work. Before engaging in this work the student must secure the written approval of a member of the faculty of architecture.

*Arch. 31-32.—Architectural Design—*Semesters 1 and 2
(0 and 22) 7 1/3 cr.

Prerequisite: Architecture 22.

A series of problems in design, composition and planning, sketch problems, beaux-arts problems.

Architectural library reference books and plates.

MR. SCHUHOLZ MR. HARTELL

*Arch. 33-34.—Cast Drawing—*Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Architecture 24.

Advanced work in the drawing of antique sculpture, study of anatomy. All work is in color. The student may choose his medium such as charcoal, conte, pastel, etc. Modeling.

MR. HODGE

*Arch. 35.—Historic Ornament—*Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Architecture 22, 24, 26.

Motifs in historic ornament. Lectures and large drawings in water color.

MR. SCHUHOLZ

*Arch. 37-38.—Building Construction—*Semester 1 (3 and 2)
3 2/3 cr., Semester 2 (2 and 2) 2 2/3 cr.

Carpentry: study of building materials, their uses and forms; details of frame construction, hardware, estimates and specifications; problems in calculation, working drawings. Blue printing.

MR. LEE

*Arch. 40.—Life Drawing—*Semester 2 (0 and 2) 2/3 cr.

Studies of the nude and draped figure in charcoal, pencil, and pen and ink. Quick sketches for action and movement. A course designed to meet the needs of the architect.

MR. HODGE

Arch. 40.5.—History of Art—Semester 2 (2 and 0) 2 cr.

Lectures on periods and styles of painting and sculpture. Stereopticon and photographs.

MR. HODGE

Arch. 41-42.—Architectural Design—Semester 1 (0 and 21) 7 cr.
Semester 2 (0 and 20) 6 2/3 cr.

Prerequisite: Arch. 32.

Advanced problems in architectural design. Composition, planning, etc., worked up in detail. Eight and ten hour sketch problems. Archaeology, beaux-arts problems, southern inter-collegiate architectural competition.

Architectural library books and plates as reference.

MR. HARTELL

Arch. 43-44.—Building Construction—Semesters 1 and 2
(3 and 0) 3 cr.

Prerequisite: Architecture 38.

Masonry; study of foundations, mortars, details of masonry construction, estimates, specifications, superintendence, problems in calculation.

MR. LEE

Arch. 45-46.—Structural Design—Semester 1 (0 and 6) 2 cr.
Semester 2 (0 and 8) 2 2/3 cr.

Prerequisite: Architecture 38.

Preparation of complete working drawings and specifications for frame and masonry buildings, detail drawings of the construction with necessary calculations. Steel and reinforced concrete design. Blue printing.

MR. LEE

Arch. 47.—Mechanical Plant—Semester 1 (2 and 0) 2 cr.

A study of various systems of heating and ventilating of buildings, electrical installations, plumbing, etc., with applications to practical problems.

MR. LEE

Arch. 48.—Professional Practice—Semester 2 (1 and 0) 1 cr.

Office management and organization, competitions, laws, contracts, ethics. American Institute of Architects documents.

MR. LEE

BOTANY AND BACTERIOLOGY

MR. BARRE

MR. AULL

MR. ROSENKRANS

MR. RICE

Bot. 10.—General Botany—Semester 2 (3 and 2) 3 2/3 cr.

A course designed to give a general survey of the principles manifest in the life of plants. The first part of the semester is devoted to a study of the form, structure and physiology of the higher plants, followed by a study of algae, bacteria, fungi, liverworts, mosses, with the application of biological laws. Descriptions, life histories and the adaptation of the representative organisms are considered.

Text-book: *A Textbook of General Botany*—Smith, Overton, etc.

MR. ROSENKRANS

Bot. 21.—Agricultural Botany—Semester 1 (2 and 2) 2 2/3 cr.

The structure and functions of the various parts of the higher seed plants and the broad principles of metabolism, growth, and reproduction are first taken up, followed by a study of the lower organisms.

Text-book: *Botany with Agricultural Applications*—Martin.

MR. ROSENKRANS

MR. RICE

Bot. 22.—Agricultural Botany—Semester 2 (2 and 2) 2 2/3 cr.

A continuation of course 21, dealing with the changes in form, structure, and methods of reproduction from the lower to the higher forms of plants. The latter part of the semester is devoted to systematic botany.

Text-book: *Field, Forest, and Garden Botany*—Gray.

MR. ROSENKRANS

MR. RICE

Bot. 30.—Plant Physiology—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Botany 10 or 21; one year of chemistry, and one semester of physics.

A study of the use of the different kinds of cells, tissues, and organs of plants, the object being to teach the students how plants live and grow and why they are dependent on certain physical factors, as light, water, air, etc.

Text-book: *Text-book of Botany* Vol. I, Part II—Coulter, Barnes and Cowles, supplemented by lectures and reports of technical papers.

MR. ROSENKRANS MR. RICE

Bot. 32.—Forestry—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Botany 10 or 21.

A course dealing with the general principles of forestry, and the practical methods applied in lumbering, forest propagation, and conservation.

Text-book: *Elements of Forestry*—Moon and Brown.

MR. ROSENKRANS MR. RICE

Bot. 41.—Field Crop Diseases—Semester 1 (2 and 2) 2 2/3 cr.

A systematic study of fungi with special reference to species causing diseases of field crops. The students are taught to recognize the more common diseases and the question of prevention and practicable remedies is fully discussed.

Text-book: To be selected.

MR. ROSENKRANS

Bot. 43.—Orchard and Truck Crop Diseases—Semester 1 (2 and 2) 2 2/3 cr.

A study of the fungi causing diseases of all fruits and vegetables, special stress being placed upon the symptoms, effect upon the host plants, and control measures.

Text-book: To be selected.

MR. ROSENKRANS

Bact. 31.—General Bacteriology—Semester 1 (2 and 4) 3 1/3 cr.

A course designed to give the student a clear working knowledge of the fundamentals of bacteriology. The relation and importance of bacteria to agriculture are stressed. Particular attention is paid to types found in milk, soil and water.

Text-books: *Bacteriology*—Buchanan. Laboratory Manual. *Laboratory Technique in Bacteriology*—Levine.

MR. AULL

Bact. 40.—Dairy Bacteriology—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Bacteriology 31.

A course for seniors who major in dairying. A detailed study is made of the relation of bacteria to milk and milk products.

Text-book: *Milk*—Heineman. Laboratory Manual, Standard Methods of Milk Analysis and Mimeographed Notes.

MR. AULL

Bact. 42.—Sanitary Bacteriology—Semester 2 (2 and 4)
3 1/3 cr.

Prerequisite: Bacteriology 31.

A course designed to meet the needs of students who major in chemistry. A study is made of the location and protection of water supplies, the purification of water, and the proper disposal of sewage.

Text-books: *Elements of Water Bacteriology*—Prescott and Winslow. *Clean Water and How to Get It*—Hazen.

Laboratory Manual: Standard Methods for the Examination of Water and Sewage of the A. P. H. A., and Mimeographed Notes.

MR. AULL

Bact. 44.—Soil Bacteriology—Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Bacteriology 31.

This course is primarily for students majoring in agronomy.

A study is made of the relation of microorganisms to the nitrogen, carbon, sulphur and iron cycles and to the physical properties of soil.

Text-book: To be selected. Laboratory Manual: To be selected.

MR. AULL

CHEMISTRY

MR. BRACKETT

MR. LIPPINCOTT

MR. MITCHELL

MR. POLLARD

MR. OTTO

MR. DAVENPORT

MR. McCLUER

Chem. 11-12.—General Chemistry—Semesters 1 and 2 (3 and 2)
3 2/3 cr.

An introduction to chemistry, including the preparation and properties of the common substances, together with the consideration of the fundamental principles of chemical theory. Lecture experiments and laboratory exercises supplement the class work.

Text-books: *Elementary Study of Chemistry*—McPherson and Henderson. Laboratory Manual; *Exercises in General Chemistry*—Pollard.

MR. POLLARD

MR. OTTO

MR. McCLUER

Chem. 21.—Elementary Analytical Chemistry—Semester 1
(1 and 3) 2 cr.

Prerequisite: Chemistry 11, 12.

A brief study of the qualitative detection of the common elements, followed by class and laboratory instruction of the principles of gravimetric and volumetric methods used in elementary analysis.

MR. DAVENPORT

Chem. 22.—Agricultural Organic Chemistry—Semester 2
(2 and 2) 2 2/3 cr.

Prerequisite: Chemistry 11, 12.

A study of those facts and principles of organic and biological chemistry which are fundamental to the sciences dealing with plant and animal life.

Text-book: *Fundamentals of Organic and Biological Chemistry*—Phillips.

MR. BRACKETT MR. DAVENPORT

Chem. 23.—Qualitative Analysis—Semester 1 (2 and 8) 4 2/3 cr.

Prerequisite: Chemistry 11, 12.

The properties and reactions of metallic elements and of the common inorganic and organic acids, also the qualitative analysis of a number of solutions and solid mixtures. In the theoretical work, special attention is paid to the theory of electrolytic dissociation and the law of mass action.

Text-book: *Qualitative Chemical Analysis*—A. A. Noyes.

MR. LIPPINCOTT

Chem. 24.—Quantitative Chemistry—Semester 2 (2 and 8)
4 2/3 cr.

Prerequisite: Chemistry 11, 12.

Lectures and laboratory instruction designed to prepare students to understand the mathematical relations, and the fundamental laws of chemistry, and to illustrate the principles involved in both gravimetric and volumetric methods used in elementary analysis.

Text-books: *Quantitative Analysis*.—Mahin. *Laboratory Manual of Introductory Quantitative Analysis*—Nichols.

MR. LIPPINCOTT

Chem. 25-26.—Organic Chemistry—Semesters 1 and 2 (3 and 2)
3 2/3 cr.

Prerequisite: Chemistry 11, 12.

A study during the first semester of the underlying prin-

ciples of organic chemistry; the more common saturated and unsaturated aliphatic hydrocarbons; alcohols and their derivatives and aldehydes and ketones.

The second semester is devoted to the study of amines, polyatomic alcohols; hydroxyacids; carbohydrates; proteins; benzine and some of its homologues and a few of the more important dyes.

The laboratory course involves the preparation and purification of compounds selected from the fatty and aromatic series for the illustration of important synthetic reactions.

Text-books: *Organic Chemistry*—Remsen and Orndorff. *Laboratory Manual of Organic Chemistry*—W. R. Orndorff.

MR. LIPPINCOTT

Chem 31-32.—Physical Chemistry—Semesters 1 and 2 (3 and 4)
4 1/3 cr.

Prerequisite: Chemistry 11, 12.

A systematic presentation of modern chemical theory in which special attention is paid to the following topics: gases, liquids, and solids; the theory of solutions; reaction velocity, catalysis and chemical equilibrium; the Phase Rule; colloid chemistry; thermo-chemistry and elementary electro-chemistry.

The laboratory work involves qualitative and quantitative experiments illustrating the principles of physical chemistry and including practice in performing physico-chemical measurements. An important feature of this course is the presentation of detailed reports based upon data obtained in the laboratory.

Text-books: *Physical Chemistry*—Bigelow. *Laboratory Outlines in Physical Chemistry*.—Briggs.

MR. MITCHELL

Chem. 33.—Quantitative Chemistry—Semester 1 (0 and 4)
1 1/3 cr.

Prerequisite: Chemistry 24.

A continuation of Chemistry 24 involving the analysis of

limestone, clay, silicates and the products of some important industrial and metallurgical operations as coal, pig iron, steel, etc. Electrolytic methods and separations.

Text-books: *Quantitative Analysis*—Mahin. Other standard reference books.

MR. MITCHELL

Chem. 34.—Gas and Fuel Analysis—Semester 2 (0 and 2) $2\frac{2}{3}$ cr.

Prerequisite: Chemistry 24.

A course consisting of the analysis of various gases and mixtures of gases, such as coal gas, flue gas, natural gas, air and others. Also the analysis of various fuels.

Text-book: *Gas Analysis*—Dennis.

MR. LIPPINCOTT

Chem. 35-36.—Organic Chemistry—Semesters 1 and 2 (2 and 2) $2\frac{2}{3}$ cr.

Prerequisite: Chemistry 25, 26.

A review and extension of Chemistry 25, 26, the greater portion of time being given to the study of aromatic compounds.

The laboratory work is more advanced and the greater portion of the time will be devoted to quantitative organic analysis.

Text-book: *Organic Chemistry*—Perkin and Kipping.

MR. LIPPINCOTT

Chem. 38.—Dairy Chemistry—Semester 2 (2 and 4) $3\frac{1}{3}$ cr.

Prerequisite: Chemistry 21 and 22.

Not given in 1927-28.

Chem. 41-42.—Inorganic Chemistry—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: Chemistry 11, 12.

A review, extension and continuation of Chemistry 1, with

special reference to the laws and theories of chemistry, and a study of some of the rarer substances.

Text-book:

MR. BRACKETT

Chem. 43-44.—Colloid Chemistry—Semesters 1 and 2 (2 and 0)
2 cr.

Prerequisite: Chemistry 31, 32.

The general theory of colloid chemistry, with some of its applications in industrial chemistry, dyeing, photography, ceramics, soils, biology, food, etc.

Text-book: *Applied Colloid Chemistry*—Bancroft.

MR. POLLARD

Chem. 45.—History of Chemistry—Semester 1 (2 and 0) 2 cr.

Prerequisite: Chemistry 25, 26.

A study of the development of the science of chemistry from the earliest times to the present day.

Text-book: *History of Chemistry*—Moore.

MR. BRACKETT

Chem. 46.—Stoichiometry—Semester 2 (2 and 0) 2 cr.

Prerequisite: Chemistry 11, 12.

A study of chemical equations, the various kinds in use with their meaning and value; different ways of balancing equations, calculations of various kinds involved in chemistry.

Text-book: *General Calculations*—Ashley.

MR. BRACKETT

Chem. 47.—Technical Analysis-Thesis—Semester 1 (0 and 9)
3 cr.

Prerequisite: Chemistry 24.

The analysis of commercial fertilizers, feeding materials, waters, oils, etc.

Text-book: *Methods of the Association of Official Agricul-*

tural Chemists. Standard reference books on quantitative analysis.

MR. MITCHELL

Chem. 48.—Selected Topics in Chemistry—Semester 2 (4 and 0)
4 cr.

Selected topics in inorganic, organic, industrial, agricultural and sanitary chemistry, to suit the needs of the student.

MR. BRACKETT

Chem. 50.—Thesis—Semester 2 (0 and 9) 3 cr.

Original investigation of an assigned problem, including the writing of a thesis.

Chem. 52.—Advanced Laboratory Practice—Semester 2
(0 and 3) 1 cr.

Advanced laboratory practice in inorganic, organic, agricultural and sanitary chemistry to suit the needs of the student.

MR. MITCHELL

Chem. 53-54.—Physiological Chemistry—Semesters 1 and 2
(2 and 2) 2 2/3 cr.

Prerequisite: Chemistry 25 and 26.

Chem. 55.—Chemistry of Feeds—Semester 1 (2 and 4) 3 1/3 cr.

Prerequisite: Chemistry 21 and 22.

Not offered in 1927-28.

CIVIL ENGINEERING

MR. CLARKE

MR. GLENN

MR. STEVENSON

C. E. 21-22.—Surveying—Semesters 1 and 2 (2 and 4) 3 1/3 cr.

Prerequisite: Math. 11, 12.

A course designed to give the student considerable facility in the theory and use of modern surveying instruments and methods, including the plotting of notes for maps and profiles.

Text-book: *Principles and Practice of Surveying*—Breed and Hosmer.

MR. CLARKE MR. STEVENSON

C. E. 23.—*Surveying*—Semester 1 (1 and 2) 1 2/3 cr.

Prerequisite: Math. 11, 12.

A course covering only the more simple and fundamental theory and use of the tape, transit, and level.

Text-book: *Principles and Practice of Surveying*—Breed and Hosmer.

MR. STEVENSON

C. E. 28.—*Summer Camp*. (Two weeks at end of sophomore and junior years.)

Prerequisite: C. E. 21, 22.

A course comprising the complete survey for a road between two selected termini.

In lieu of attendance at this camp, credit will be awarded for two consecutive months bona fide employment of a satisfactory engineering nature.

MR. CLARKE

C. E. 31. — *Railroad Curves and Earthwork* — Semester 1 (3 and 0) 3 cr.

Prerequisite: C. E. 21, 22.

A course covering the theory and solution of problems involving simple, compound and reverse curves. Special attention is given to the spiral transition from tangent to curve. The setting of slopestakes and various problems of computation of earthwork from cross sections and also from contours are thoroughly covered in this course.

Text-book: *Railroad Curves and Earthwork*—Allen.

MR. CLARKE

C. E. 33.—Construction Methods—Semester 1 (2 and 0) 2 cr.

A course covering the fundamental principles of the design of masonry structures and foundations.

Text-book: *Masonry Construction*—Baker.

MR. CLARKE

C. E. 34.—Graphic Statics—Semester 2 (1 and 2) 1 2/3 cr.

A study of the principles of graphic analysis and the application of these principles. This course is designed to cover all common problems of structural design solved by graphics.

Text-book: *Graphic Statics*—Malcolm.

MR. GLENN

C. E. 36.—Structural Design—Semester 2 (0 and 4) 1 1/3 cr.

Prerequisite: M. E. 31, 37.

A course devoted for the first half of the semester to a thorough study of built-up sections, riveting and the design of details. The second half is devoted to actual design of structures.

Text-book: *Design of Highway Bridges*—Ketchum.

MR. GLENN

C. E. 40.—Bridge Design—Semester 2 (2 and 6) 4 cr.

Prerequisite: C. E. 34, 36, M. E. 51.

A general course in the field of bridge engineering along with the practice of working out actual designs.

Text-book: *Design of Highway Bridges*—Ketchum.

MR. GLENN

C. E. 41.—Roads and Pavements—Semester 1 (3 and 0) 3 cr.

Prerequisite: C. E. 24.

A study of the design, location and construction of roads and pavements. Must be taken with C. E. 31 and M. E. 51.

Text-book: *Roads and Pavements*—Agg.

MR. GLENN

C. E. 42-43.—Road Materials Testing Laboratory—Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: M. E. 51 and registration or credit in C. E. 47.

The actual tests and analysis of road and construction materials.

Text-book: *Sampling and Testing of Highway Materials*—Barton and Doane.

MR. GLENN

C. E. 44.—Water Supply—Semester 2 (2 and 0) 2 cr.

Prerequisite: C. E. 47.

A course devoted to the engineering procedure necessary to determine the quantity and quality of various sources of water supply; the method used to improve the quality of unpotable waters; the construction of works for the collection of water and works for the distribution of water.

MR. CLARKE

C. E. 45.—Reinforced Concrete Design—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: C. E. 41, M. E. 31, 37, 38, 51.

A course devoted to the theory and practice of reinforced concrete design.

MR. GLENN

C. E. 46.—Sewerage and Sewage Disposal—Semester 2 (3 and 0) 3 cr.

Prerequisite: C. E. 47.

A very specific course covering all the points of theory and practice involved in the construction of a modern sewerage system, and the various methods employed to dispose of sewage in accordance with sanitary law.

Text-book: *Sewerage and Sewage Treatment*.—Babbitt.

MR. CLARKE

C. E. 47.—Reinforced Concrete Design—Semester 1 (2 and 0)
2 cr.

Prerequisite: M. E. 51.

Similar to course C. E. 45.

MR. CLARKE

C. E. 48.—Engineering Investigation—Semester 2 (0 and 2)
 $2\frac{2}{3}$ cr.

Prerequisite: Registration in C. E. 44 and 46.

A course consisting of an actual design of a water works and sewerage system for some nearby town.

MR. CLARKE

C. E. 49.—Hydraulics—Semester 1 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22.

A course covering the principles of the flow of water, with particular reference to the need of knowledge thereof in connection with the study of water supply systems and sewerage.

Text-book: *Hydraulics*—Daugherty.

MR. CLARKE

C. E. 50-51.—Thesis—Semesters 1 and 2 (0 and 2) $2\frac{2}{3}$ cr.

Every senior, prior to graduation, is required to prepare and submit a thesis. This may be either an original theoretical investigation, or an actual design similar to the work done in courses 40, 41, 42, 44 and 46. The time allotted to this subject represents merely the time devoted thereto under the direct supervision of the instructor. The student is expected to put in much additional individual work.

MR. CLARKE

C. E. 52.—Hydraulics—Semester 2 (2 and 0) 2 cr.

Prerequisite: Math. 21, 22.

A general course in the fundamental principles governing the flow of water through orifices, wiers, pipes and channels.

Text-book: *Hydraulics*—Daughtery.

MR. TUCKER

DAIRY HUSBANDRY

MR. LAMASTER

MR. GOODALE

D. H. 20.—Dairying—Milk Products, Production and Manufacture—Semester 2 (2 and 2) 2 2/3 cr.

The object of this course is to give the student a knowledge of the production, care and testing of milk and its products; also the management and feeding of dairy cattle.

Text-book: *Productive Dairying*—Washburn.

MR. GOODALE

D. H. 30.—Judging—Semester 2 (0 and 2) 2/3 cr.

A study of the breeds, type and characteristics of dairy cattle with practice in judging and selection of animals for production and exhibit.

MR. LAMASTER

D. H. 41-42.—Dairy Manufacturing—Semester 1 (2 and 2) 2 2/3 cr. Semester 2 (2 and 4) 3 1/3 cr.

Prerequisite: Dairy 20.

A course dealing with the problems of market milk and the intensive study of the manufacture of butter, cheese, and ice cream.

Text-books: *Principles and Practice of Buttermaking*—McKay and Larseen. *The Book of Cheese*—Thom and Fisk. *The Book of Ice Cream*—Fisk.

MR. GOODALE

D. H. 43.—Creamery Organization and Management—Semester 1 (3 and 0) 3 cr.

Prerequisite: Dairy 20.

A thorough study of the organization and operation of commercial creameries, cream accounting, advertising and marketing of dairy products.

Text-book: *Management of Dairy Plants*—Mortensen.

MR. GOODALE

D. H. 44.—Breeding—Semester 2 (1 and 2) 1 2/3 cr.

Prerequisite: Dairy 20 and 40—Genetics.

A study of the practical application of the principles of genetics in its relation to dairy cattle breeding. This will be followed by an extensive study of the leading families and individuals of the major dairy breeds.

Text-book: To be selected.

MR. LAMASTER

D. H. 45.—Feeding and Management—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Dairy 20.

An advanced study of feeds, care, management and development of dairy cattle and methods of milk production.

Text-book: *Dairy Cattle Feeding and Management*—Larson and Putney.

MR. LAMASTER

D. H. 47.—Genetics—Semester 1 (2 and 2) 2 2/3 cr.

A course dealing with the laws of heredity with special emphasis on their application in the animal kingdom.

Text-book: *Principles of Genetics*—Sinnott and Dunn.

MR. LAMASTER

D. H. 48.—Advanced Dairy Farming—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Dairy 20.

A study of dairy herds based on milk and feeding records, dairy farming and its relation to soil fertility, and dairy farm management.

Text-book: *Dairy Cattle and Milk Production*—Eckles.

MR. LAMASTER

*D. H. 51-50.—Problems—*Semesters 1 and 2 (1 and 0) 1 cr.

A study of special research problems in production and manufactures. The thesis problem required of each senior will be reviewed.

MR. LAMASTER

MR. GOODALE

DRAWING

MR. LEE

MR. KLUGH

MR. HARRIS

MR. HODGE

*Drawing 11, 12.—Freehand Drawing—*Semesters 1 and 2 (0 and 2) 2/3 cr.

Drawing is the language of the engineer, and frequently freehand sketching is the mode of expression.

The student is thoroughly drilled in the fundamental principles of perspective, from which he develops the ability to represent engineering shapes. Every effort is made to develop the student's imagination. Machine parts are used for models.

The first semester is prerequisite to the second.

MR. HARRIS

MR. HODGE

*Drawing 13, 14.—Mechanical Drawing—*Semesters 1 and 2 (0 and 2) 2/3 cr.

The student is thoroughly grounded in the principles of orthographic projection. The course takes up geometrical problems, lettering, working drawings from sketches and machine parts, tracing and printing.

The first semester is prerequisite to the second.

Text-book: *Engineering Drawing*—French.

MR. KLUGH

MR. HARRIS

*Drawing 25.—Mechanical Drawing—*Semester 1 (0 and 2) 2/3 cr.

Prerequisite: Drawing 12 and 14.

Fundamentals of descriptive geometry demonstrated in actual working drawings. Relationship of projections to each

other in the reading of drawings. The usual types of projections required in class exercises, particularly with reference to intersections and developments.

MR. KLUGH

Drawing 26.—Structural Drawing—Semester 2 (0 and 2) $2\frac{2}{3}$ cr.

Prerequisite: Drawing 12, 14 and 25.

Elementary structural principles, study of symbols, proportions and minor design. Reading of structural drawings, study of methods in drafting, tracing and blue printing.

MR. KLUGH

Drawing 28.—Mechanical Drawing—Semester 2 (0 and 2)
 $2\frac{2}{3}$ cr.

Prerequisite: Drawing 25.

Shop drawings from sketches and machine parts, assemblies and details required. Use of methods in shop practice, drafting, tracing and blue printing. Reading of drawing.

MR. KLUGH

Drawing 31, 32.—Machine Design—Semesters 1 and 2 (0 and 3)
1 cr.

Prerequisite: Drawing 28.

Principles of machine design carefully studied and worked out in class problems. Theory stressed in lectures with problems required in theory and practice. Working drawings required and reading of them practiced. Tracing and blue printing.

MR. KLUGH

ECONOMICS AND SOCIOLOGY

MR. BREARLY

E. & S. 31, 32.—Psychology—Semesters 1 and 2 (2 and 2) 3 cr.

An introductory course in general psychology emphasizing the study of the nervous system, the psychology of learning, and selected problems in social psychology. This course is especially

valuable for students taking advanced work in social science or education.

MR. BREARLEY

E. & S. 33.—Economics for Students of Agriculture—Semester 1 or 2 (3 and 0) 3 cr.

Prerequisite: History 14 or Agricultural Economics 12.

An elementary course in descriptive economics similar to Economics and Sociology 11, except that it is somewhat more extended and is especially adapted to the needs of students in agriculture.

MR. BREARLEY

E. & S. 41.—Economics—Semester 1 (2 and 0) 2 cr.

Prerequisite: History 14 or Agricultural Economics 12.

Required for graduation except in Course 1.

An elementary course in descriptive economics designed to introduce the student to modern business conditions and practices. Among the topics considered are risk-taking, money, banking, business cycles, foreign trade, supply and demand, etc.

MR. BREARLEY

E. & S. 42.—Sociology—Semester 2 (2 and 0) 2 cr.

Required for graduation except in Course 1.

A study of the elementary principles of sociology and of some of the special social problems considered in the light of general principles.

MR. BREARLEY

E. & S. 44.—Introduction to Psychology—Semester 2 (2 and 0) 2 cr.

This course will endeavor to give a summary of the essentials of elementary psychology. The contributions of psychology to the understanding of "human nature" will be stressed.

MR. BREARLEY

EDUCATION

MR. CRANDALL

MR. AYERS

MR. MCLEAN

MR. DUGGAN

Courses in Education are offered to aid persons in preparing for the following general types of positions:

1.—Teachers of Agriculture.

2.—Teachers of Science, Mathematics, and other high school subjects.

The following sequences of courses are planned to train men for these positions:

Teachers of Agriculture—Agricultural Education 31, 32, 40, 41, 42.

Teachers of high school subjects—Education 32, 35, 45, 48, 52.

Ed. 31.—Introduction to Agricultural Education—Semester 1 (1 and 6) 3 cr.

The principal purpose of this course is to familiarize students with the work of teachers of agriculture in local communities. Students observe and report on the work of all-day, part-time, evening and day unit classes; community and promotional work; equipment and general organization of a program in agricultural education for a local community. Students are expected to spend two afternoons each week in the practice department.

MR. CRANDALL MR. AYERS MR. MCLEAN MR. DUGGAN

Ed. 32.—Educational Psychology—Semester 2 (2 and 3) 3 cr.

A study of the learning process in terms of situation, bond, response; how to study; effect of attitude, feelings and method on the learning process; how to remember; value of recognition and proper control of instincts in formulating educational programs; habit formation; individual differences as affecting educational and vocational performances; the psychology involv-

ed in the interview and in personality as affecting development of teachers as vocational and educational leaders. Special attention is given to the study of mental ability, attitude, interests, and aptitudes of the groups affected by education in its various phases.

MR. AYERS

Ed. 35.—Introduction to Education—Semester 1 (3 and 0) 3 cr.

A general introductory course required of all students majoring in education. This course takes up a survey of the general field of education for the purpose of giving the student a background for more specialized courses in this subject.

MR. CRANDALL

*Ed. 40.—Practice Teaching in Agriculture—Semester 2
(0 and 15) 5 cr.*

Each student is required to assume the work and responsibility of a teacher of agriculture in a local community. Students are expected to organize and conduct part-time, evening class, and day unit courses in addition to the all-day program. Students are to spend five afternoons each week in the practice departments, and teach two evening classes each week for ten weeks.

MR. CRANDALL MR. AYERS MR. MCLEAN MR. DUGGAN

*Ed. 41.—Principles of Vocational Education—Semester 1
(1 and 9) 4 cr.*

In this course emphasis is placed on the participation of students in all possible phases of the work of a teacher of agriculture in a local community. Students participate in organizing and conducting all-day, part-time, evening and day unit classes. Students are held responsible for definite phases of community and promotional work. Instruction in principles and methods of teaching is given in connection with students' participation. Students are expected to spend two afternoons each week in the practice departments.

MR. CRANDALL MR. AYERS MR. MCLEAN MR. DUGGAN

Ed. 42.—Methods in Agricultural Education—Semester 2
(3 and 0) 3 cr.

The developing of teaching material in vocational agriculture receives special emphasis in this course. Students are expected to make careful analyses of conditions and practices of farming in a local community as one of the chief sources of subject matter.

MR. CRANDALL

ELECTRICAL ENGINEERING

MR. DARGAN

MR. RHODES

MR. WILSON

E. E. 30.—Textile Electrical Machinery—Semester 2 (2 and 2)
2 2/3 cr.

Prerequisite: Physics 21, 22.

A course in the essential principles of electrical equipment used in the textile industry, including two hours per week of laboratory practice.

MR. RHODES

MR. WILSON

E. E. 31.—Direct Current Machinery—Semester 1 (5 and 0)
5 cr.

Prerequisite: Math. 21, 22, Physics 21, 22.

A course embracing the principles and characteristics of direct current machinery and auxiliaries.

MR. RHODES

E. E. 32.—Alternating Current Circuits—Semester 2 (5 and 0)
5 cr.

Prerequisite: E. E. 31.

A physical and mathematical development of alternating current circuits embodying a thorough drill in the standard methods of solution.

MR. RHODES

*E. E. 33, 34.—Electrical Measurements—*Semesters 1 and 2 (0 and 3) 1 cr.

Prerequisite: Math. 21, 22, Physics 21, 22, with E. E. 31.

A laboratory study of electric and magnetic circuits, and representative types of electrical instruments including alternating current circuits and instruments in the second semester.

MR. RHODES MR. WILSON

*E. E. 35, 36.—Dynamo Laboratory—*Semesters 1 and 2 (0 and 2) 2/3 cr.

Prerequisite: Should parallel course E. E. 53.

A course similar to E. E. 45, 46 but planned especially for students in mechanical engineering.

MR. DARGAN MR. WILSON

*E. E. 41, 42.—Alternating Current Machinery—*Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: E. E. 32, 34.

A comprehensive treatment of the theory, characteristics and uses of the leading types of generators, motors, transformers, converters and other electric power equipment; problems in application engineering.

MR. DARGAN

*E. E. 43.—Electric Circuits—*Semester 1 (2 and 0) 2 cr.

Prerequisite: E. E. 32, 34.

An advanced study of the principles of electrostatics and electromagnetics in their relations to apparatus and equipment.

MR. RHODES

*E. E. 44.—Power Transmission—*Semester 2 (2 and 0) 2 cr.

Prerequisite: E. E. 43.

An application of the principles of E. E. 43 to the problems of transmission and distribution of electric power.

MR. RHODES

*E. E. 45, 46.—Dynamo Laboratory—*Semesters 1 and 2 (0 and 4)
1 1/3 cr.

Prerequisite: E. E. 32, 34.

A laboratory course affording the student opportunity to determine for himself the actual operating characteristics of commercial machinery and control apparatus.

MR. DARGAN MR. WILSON

*E. E. 47, 48.—Electrical Design—*Semesters 1 and 2 (0 and 2)
2/3 cr.

Prerequisite: Should be paralleled by senior courses in E. E.

Problems in design affording the student opportunity to undertake projects involving the various principles of his courses in science and engineering.

MR. RHODES

*E. E. 51.—Elements of Electrical Engineering—*Semester 1
(2 and 2) 2 2/3 cr.

Prerequisite: Physics 24, 26.

A study of electrical equipment as related to civil engineering applications. Includes two hours per week of laboratory practice.

MR. WILSON

*E. E. 53.—Alternating Current Machinery—*Semester 1 (3 and 0) 3 cr.

Prerequisite: E. E. 32, 34.

A study of the principal types of alternating current machines and auxiliaries with special emphasis given to the characteristics of these machines as related to the solution of problems in power engineering.

MR. RHODES

*E. E. 54.—Radio Communication—*Semester 2 (2 and 0) 2 cr.

This course embraces the essential principles of modern

radio reception and transmission. Includes a series of laboratory experiments.

MR. RHODES

E. E. 55.—Thermionic Tubes—Semester 1 (2 and 0) 2 cr.

A study of the characteristics of vacuum tubes for amplification, rectification and transformation of electric power. Includes a series of laboratory experiments.

MR. RHODES

E. E. 56.—Electrical Power Plants—Semester 2 (2 and 0) 2 cr.

A brief study of the applications of electrical equipment to power plants, sub-stations, etc.

MR. DARGAN

ENGLISH

MR. DANIEL

MR. TAYLOR MR. BRADLEY MR. LANE MR. KINARD

MR. RANKIN

English A and B.—Semesters 1 and 2 (2 and 0) 0 cr.

All freshmen, on entering Clemson College, must take an examination designed to test their ability to write English without gross errors in spelling, grammar, diction, sentence-structure and punctuation. The papers submitted will be rated as either "passes" or "not passes". Those students whose papers are not rated as passable must take English A and B before they are permitted to take English 11 and 12. English A and B is a non-credit course which gives a review of fundamental English.

Provisions are made for the transfer of a student from English A and B to English 11 and 12 and vice versa. This will be done on recommendation of the student's instructor and with the approval of the Director of the Arts and Science Department and of the Registrar.

English 11, 12.—Composition and American Literature—Semesters 1 and 2 (2 and 0) 2 cr.

This course, which presupposes a knowledge of English grammar and syntax, gives training in composition and rhetoric, and letter writing.

The lives of the chief writers, a study of selections from each, and a class-room reading of many other selections, make up the principal work of the course in literature.

Supplementary Reading: A supplementary reading course embracing some of the best works of the leading authors is required, and written reports are made upon these.

Text-books: *Composition and Rhetoric* to be selected; *Century Collegiate Handbook of Writing*; Webster's *Secondary School Dictionary*; or a book of higher grade.

MR. TAYLOR MR. LANE MR. KINARD MR. RANKIN

English 21, 22.—Literature and Advanced Composition—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 11, 12.

This is a survey course comprising an intensive study of the types of literature from outstanding authors and is used as a basis for advanced composition. Many of the themes are discussed in class, and consultations are held with students for individual discussion.

Text-books: *Century Collegiate Handbook of Writing*; Webster's *Secondary School Dictionary*; or book of higher grade.

MR. BRADLEY MR. TAYLOR MR. LANE MR. KINARD

English 31.—Public Speaking—Semester 1 (2 and 0) 2 cr.

Prerequisite: English 21, 22.

In this course a text-book is used for a study of the theory of the subject, but most of the work is practical, stressing correct pronunciation, clear enunciation, and direct natural delivery. Selections are memorized for practice. Original speeches

are prepared and delivered. Extemporaneous speaking is required.

English 31a, 32a.—Public Speaking—Semesters 1 and 2 (1 and 0)
1 cr.

One period a week for session for agricultural courses.

MR. DANIEL

English 32.—Business Law—Semester 2 (2 and 0) 2 cr.

This course seeks to fix legal principles in the student's mind, to lead him to realize the limitations of the legal knowledge of the layman, to give definite ideas as to how laws operate in actual practice, and to prepare him to carry on business transactions with such care that he may avoid legal difficulties.

The course begins with a brief survey of the origin, purpose and development of laws; then takes up a study of contracts, sales, agency, negotiable instruments, partnership, corporations, personal property and real property.

Problems from actual cases are discussed in class, the students taking opposing sides. Contracts, notes, mortgages, checks and other papers are written and discussed.

Text-book: *Business Law*—Conyington-Bergh.

MR. DANIEL

English 41.—The Essay—Semester 1 (2 and 0) 2 cr.

Prerequisite: Eng. 21, 22.

A course for students who desire general practice in writing. It is designed to develop accuracy in the mechanics of writing as well as a degree of fluency in composition. Attention is given to purely creative writing.

MR. LANE

English 42.—The Short Story.—Semester 2 (2 and 0) 2 cr.

Prerequisite: Eng. 21, 22.

A study of the modern short story models; the technique of

the short story; and the development of plot from basic ideas. Two stories will be required during the semester.

MR. LANE

English 43, 44.—Journalism, Dramatic Literature—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21, 22.

Journalism: Text-books are used as the basis of the course in journalism which is designed to train students in the preparation of technical articles for the general reader and to help those who expect to become leaders in industrial and economic life to do occasional writing for newspapers and other publications.

Text-book: *Newspaper Editing and Writing.*

Dramatic Literature: The course in dramatic literature gives a brief survey of the development of the drama followed by a study of some of Shakespeare's plays and a modern play. Some time is also devoted to a study of present day literature. Occasional papers are required.

MR. DANIEL MR. TAYLOR

English 47, 48.—Course in Middle English: Chaucer and Langlands—Semesters 1 and 2 (2 and 0) 2 cr.

Prerequisite: English 21, 22.

The course in Middle English consists (1) of a comparative study of the poetry of Chaucer and Langland as to outstanding differences of versification, etymology, and attitude toward the clerical abuses of the period, and (2) a detailed study of the *Canterbury Tales* with respect to literary characteristics and verse form.

Text to be chosen.

MR. BRADLEY

GEOLOGY AND MINERALOGY

MR. CALHOUN

Geol. 21.—Agricultural Geology—Semester 1 (3 and 0) 3 cr.

In this course geology is considered in its practical relation to agriculture.

MR. CALHOUN

Geol. 23, 24.—General Geology—Semesters 1 and 2 (3 and 0)
3 cr.

A course in general geology for students in the arts and science group. The first semester will be devoted to structural and dynamic geology; the second semester, which will be elective, to the principles of historical geology.

MR. CALHOUN

Geol. 31.—Engineering Geology—Semester 2 (2 and 0) 2 cr.

A brief course in which the practical application of geology to engineering is emphasized. Topographical and geological maps are used in connection with the text book.

Text-book: *Elements of Engineering Geology*—Ries and Watson.

MR. CALHOUN

Geol. 33, 34.—Mineralogy—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

A comprehensive course in crystallography, physical and chemical mineralogy and descriptive and determinative mineralogy.

MR. CALHOUN

Geol. 40.—Economic Geography—Semester 2 (3 and 0) 3 cr.

A course for men electing agricultural economics. Special attention will be placed upon world conditions.

Geol. 41.—Chemical Geology—Semester 1 (2 and 0) 2 cr.

In this course structural geology, the theory of ore deposits, and the economic side of geology are emphasized. Special stress is laid upon the action of underground water in forming ores and veins. The theories of the formation of various classes of rocks are considered and special attention is given to that side of historical geology which enables the chemist to recognize cer-

tain horizons which carry minerals and ores of economic importance.

Text-book: *Elements of Engineering Geology*—Ries and Watson.

MR. CALHOUN

Geol. 42.—Meteorology—Semester 2 (2 and 0) 2 cr.

A course designed to give the student an adequate conception of the use of meteorological instruments, weather maps, and the general principles of meteorology and climatology as applied to the growing of crops.

Text-book: *Agricultural Meteorology*—Smith.

MR. CALHOUN

HISTORY

MR. HOLMES

MR. HEATH

MR. CARSON

History 11.—Citizenship—Semester 1 or 2 (3 and 0) 3 cr.

This is an orientation course designed to give a survey of the major social institutions and problems with emphasis upon government as a means by which social problems may be solved.

Supplementary and collateral reading is required.

MR. HEATH

History 13.—Political Science—Semester 1 (2 and 0) 2 cr.

This course traces the growth of the Constitution and develops the functions of the national government and of political parties. Some attention is given to comparative government.

Supplementary and collateral reading, with written reports is required.

MR. HEATH

MR. CARSON

History 14.—American Economic History—Semester 2 (2 and 0) 2 cr.

This course is a brief survey of the economic background of

colonization, the Revolution, wars, agriculture, public finance, commerce with special emphasis upon the industrial revolution in the United States and its results.

Reports upon problems are required.

MR. HOLMES MR. HEATH

*History 15, 16.—History of Civilization—*Semesters 1 and 2 (3 and 0) 3 cr.

This is a rapid survey by lectures, recitations and reading of the ancient, mediaeval and modern world.

MR. HOLMES

HORTICULTURE

MR. MUSSER

MR. NEWMAN

MR. RAWL

MR. EZELL

*Hort. 12.—Vegetable Gardening—*Semester 2 (2 and 2) 2 2/3 cr.

Principles and practices relative to the production of vegetables for home use; construction and management of cold frames and hotbeds. Practical work in planting and caring for a garden.

Text-book: *Vegetable Gardening*—Watts.

MR. EZELL

*Hort. 31.—Fruit Growing—*Semester 1 (2 and 2) 2 2/3 cr.

General study of fruits with particular reference to the home orchard sites, soils, propagation, planting, pruning, spraying and varieties.

Text-book: *Productive Orcharding*—Sears.

Required equipment—One pair hand pruning shears, one budding knife and one pruning saw.

MR. EZELL

*Hort. 41.—Systematic Pomology and Small Fruits—*Semester 1 (2 and 2) 2 2/3 cr.

Systematic Pomology—1st half 1st semester.

Small Fruits—2nd half 1st semester.

Systematic includes the classification, description, and nomenclature of native and sub-tropical fruits; identification with reference to relationship and natural classification of varieties and judging and displaying fruits.

Text-book: *Systematic Pomology*—Hedrick.

Small Fruits includes the propagation, culture, harvesting, and marketing of the blackberry, dewberry, grape, raspberry, strawberry, and other small fruits.

Text-book: *Productive Small Fruit Culture*—Sears.

MR. RAWL

Hort. 42.—Commercial Pomology—Semester 2 (2 and 2) 2 2/3 cr.

Commercial pomology deals with practical problems pertaining to fruit growing; establishment and management of large commercial orchards, inter-cropping, cover crops, marketing, etc. Commerical orchards visited.

Text-book: *Textbook of Pomology*—Gourley.

Supplemented by lectures and assigned readings.

Required equipment: One pair pruning shears, saw, and budding knife.

References: *Fundamentals of Fruit Growing*—Gardner, Bradford and Hooker. *Fruit Growing*—Chandler.

MR. RAWL

Hort. 43.—Plant Propagation and Nursery Management—Semester 1 (2 and 2) 2 2/3 cr.

A study of methods of propagating fruit trees, shrubs and the various kinds of flowering plants. The student is given practical instruction in the propagation of these plants in the field as well as in the greenhouse. The nursery consists of plantings of various kinds of deciduous and evergreen shrubs as well as the pome and stone fruits.

Text-book: *The Nursery Manual*—Bailey.

MR. NEWMAN

Hort. 44.—Landscape Gardening—Semester 2 (2 and 2) 2 2/3 cr.

A study of the principles of landscape art with reference to the improvement of home and school grounds and park areas; mapping, designing and a study of decorative plants, their identification and adaptation to landscape work.

MR. NEWMAN

Hort. 45, 46.—Olericulture—Truck and Market Gardening—Semesters 1 and 2 (2 and 2) 2 2/3 cr.

Principles and practices of commercial vegetable growing on a large scale as well as forcing crops in the greenhouse and in frames. Special attention is given to the trucking practices in this State, with particular reference to the development and management of truck farms and market gardens, planting, cultivation, fertilization, harvesting, grading, and marketing. This course combines both systematic and commercial study. Commercial sections are visited.

Text-books: *Vegetable Forcing*—Watts. *Vegetable Crops*—Thompson. Supplemented by lectures and assigned readings.

MR. MUSSER

Hort. 50, 51.—Special Problems—Semesters 1 and 2 (1 and 0) 1 cr.

Special subject requiring independent investigations by students specializing in horticulture. Results submitted in written form.

INDUSTRIAL EDUCATION

MR. TATE

Ind. Ed. 33.—Introduction to Industrial Education—Semester 1 (1 and 4) 2 1/3 cr.

An introductory course required of all students pursuing industrial education. The chief purpose of this course is to orient the students in the field of industrial education. Special emphasis will be placed on familiarizing the students with the needs for vocational education in trades and industries in South Carolina. Students are expected to spend from one to

two afternoons each week in the practice departments and visiting schools and classes.

MR. TATE

Ind. Ed. 43.—Methods in Industrial Education—Semester 1
(0 and 10) 4 cr.

A study of educational needs of textile employees, job analysis of certain jobs in the cotton mill, study of the mill as a whole, construction of courses to be taught in vocational classes and schools. Students are to spend one full day each week in mills and schools.

MR. TATE

Ind. Ed. 44.—Principles of Teaching Industrial Subjects—
Semester 2 (3 and 0) 3 cr.

Special emphasis is placed in this course on the teaching of problems in the trades and industries in South Carolina. Such topics as the project method of teaching, lesson types, teaching exercises, type studies, and lesson planning are studied in this course.

MR. TATE

Ed. 45.—Special Methods in Teaching High School Subjects—
Semester 1 (3 and 0) 3 cr.

Among the topics to be considered are the objectives of different high school subjects, course building, methods of evaluating instruction in high school subjects, comparative study of text books and laboratory manuals, and the adaptation of high school courses to local conditions.

MR. TATE

Ind. Ed. 46.—Practice Teaching in Industrial Education—
Semester 2 (0 and 15) 5 cr.

Students who pursue the curriculum in industrial education are required to observe and teach in evening and part-time classes in trades and industries. Students are expected to organize part-time, general continuation, and evening classes in addition to the work in connection with the all-day program. Students are to spend five afternoons each week in the practice

departments, and teach two evening classes each week for ten weeks.

MR. TATE

Ind. Ed. 48.—Principles of Teaching—Semester 2 (3 and 0) 3 cr.

This is a course treating of the principles of teaching high school subjects. Such topics as the project method of teaching; lesson types; teaching exercises—recitation, laboratory, supervised study, demonstration, field trip, examinations, type studies, and lesson planning,—are studied in this course.

MR. TATE

Ind. Ed. 52.—Practice Teaching—Semester 2 (0 and 15) 5 cr.

This course is required of all students in arts and science who elect a major in education. Students in arts and science observe and teach in high school departments in public schools located near the College.

MR. TATE

MATHEMATICS

MR. MARTIN

MR. SHANKLIN

MR. HUNTER

MR. JOHNSTONE

MR. EDWARDS

MRS. FITZPATRICK

Math. 11.—Trigonometry—Semester 1 (5 and 0) 5 cr.

Prerequisite: Algebra and Plane Geometry.

This course covers plane trigonometry supplemented by numerous related problems and exercises.

The first month will be devoted to a rapid review of the fundamental principles of algebra with special emphasis on the subjects which come in subsequent courses in mathematics.

MR. JOHNSTONE

MR. EDWARDS

MRS. FITZPATRICK

Math. 12.—Analytic Geometry—Semester 2 (5 and 0) 5 cr

Prerequisite: Mathematics 11.

A course comprising a study of cartesian and polar systems of coordinates, discussion and construction of loci, the straight line, transformation of coordinates, the circle, parabola,

ellipse, hyperbola, general equation of second degree involving two variables, tangents and normals, higher plane curves, equation of the plane, the straight line in space and surfaces of the second order.

Text-book: *Analytic Geometry*—Wilson and Tracy.

MR. JOHNSTONE MR. EDWARDS MRS. FITZPATRICK

Math. 15.—Mathematics for Agriculture—Semester 1 (3 and 0)
3 cr.

A course embracing the study of numerical calculations, algebraic processes, dairy problems, fertilizer formulas, cement mixtures, graphical representations of statistical data, statistics, progressions, interest, annuities, averages, ratios, correlation, etc.

MR. SHANKLIN

Math. 17, 18.—Mathematics for Science—Semesters 1 and 2
(3 and 0) 3 cr.

A course especially planned to meet the needs of freshmen taking the arts and science and the pre-medical courses. The work will cover such subjects as ratios, proportion, percentages, elementary statistics, correlations, the use of logarithms, etc.

MR. MARTIN MR. HUNTER

Math. 21.—Differential Calculus—Semester 1 (5 and 0) 5 cr.

Prerequisite: Mathematics 12.

A study of the differentiation of algebraic and transcendental functions, successive differentiation and development of functions, functions of two variables, tangents, normals, and asymptotes, applications of the derivative in mechanics.

Text-book: *Differential and Integral Calculus*—Love.

MR. MARTIN MR. HUNTER

Math. 22.—Integral Calculus—Semester 2 (5 and 0) 5 cr.

Prerequisite: Mathematics 21.

A course in integral calculus giving instruction in element-

ary forms of integration, integration of rational fractions, the definite integral, successive reductions, integration of functions of two variables, geometric application, multiple integrals, and practical problems arising in engineering subjects.

Text-book: *Differential and Integral Calculus*—Love.

MR. MARTIN MR. HUNTER

MECHANICAL ENGINEERING

MR. EARLE

MR. TUCKER	MR. CARPENTER	MR. FREEMAN
MR. JOHNSON	MR. MARSHALL	MR. SAMS

M. E. 11.—Agricultural Forge—Semester 1 or 2 (0 and 2)
2/3 cr.

A course arranged to suit the needs of the agricultural student—with talks on the materials used.

Text-book: *Farm Blacksmithing*—Frieese.

MR. JOHNSON

M. E. 13, 14.—Forge Work—Semester 1 or 2 (0 and 4) 1 1/3 cr.

A course embracing principles of forge work that will acquaint the student with the best methods of up to date practice relating to engineering. The work is in wrought iron and tool steel forgings. About one-third of the time is given to lecture work and two-thirds to practice.

M. E. 16.—Agricultural Woodwork—Semester 1 or 2 (0 and 2)
2/3 cr.

A course in woodwork planned to familiarize agricultural students with the more common tools used in the building and repairing of farm equipment.

MR. MARSHALL

M. E. 17, 18.—Woodwork—Semester 1 or 2 (0 and 4) 1 1/3 cr.

Includes bench and lathe work and is designed to familiar-

ize the student with tools and machinery commonly used in woodwork.

MR. MARSHALL

M. E. 21.—Woodwork—Semester 1 or 2 (0 and 2) $2/3$ cr.

Prerequisite: M. E. 17, 18.

A course consisting of exercises in pattern making with special reference to the principles involved. It is planned to outline to the student a general survey of the most suitable materials, special tools, and fundamental principles involved in this phase of manufacture of machinery.

MR. MARSHALL

M. E. 22.—Foundry—Semester 1 or 2 (0 and 2) $2/3$ cr.

A course giving the student a broad view of this work as related to industry from the engineering standpoint. Materials used are cast iron and nonferrous metals.

MR. JOHNSON

M. E. 31, 32.—Mechanics—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22; Physics 22, 24.

The principles of force systems, equilibrium, center of gravity, friction, moment of inertia and kinetics and their applications to engineering.

MR. TUCKER

M. E. 31.5, 32.5.—Industrial Arts—Semesters 1 and 2 (0 and 2) $2/3$ cr.

A course arranged for the teacher of mechanic arts and for those looking towards the trades. Alternates with pattern making.

Text-book: *Foundry Work*—Wendt.

MR. JOHNSON

M. E. 33, 34.—Machine Shop—Semesters 1 and 2 (0 and 4) $1\frac{1}{3}$ cr.

A course in the fundamental principles of machine shop

practice as related to engineering work, embracing the use of tools and machines and the practical study of the composition, properties, uses, and methods of heat treatment of the various metals and their alloys.

MR. FREEMAN

M. E. 33.5.—Machine Shop—Semester 1 (0 and 2) $2\frac{2}{3}$ cr.

A brief course in machine shop practice arranged for civil engineering students.

MR. FREEMAN

M. E. 35, 36.—Mechanical Engineering—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Math 21, 22.

A general survey of the field of power engineering including fuels, combustion, steam, boilers, boiler room auxiliaries, steam engines and turbines with their auxiliaries, internal combustion engines, and elementary thermodynamics of the steam and gas cycle.

MR. FERNOW MR. SAMS

M. E. 37, 38.—Mechanical Engineering—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: Math. 21, 22.

Study of fuels, combustion, steam, boilers, boiler room auxiliaries, and elementary thermodynamics of the steam and gas cycle.

MR. FERNOW

M. E. 37.5, 38.5.—Mechanical Laboratory—Semesters 1 and 2 (0 and 2) $2\frac{2}{3}$ cr.

Calibration of thermometers, gauges, study and use of indicators, calibration of nozzles and wiers, analyses of coal and gas, tests of lubricating oils. Engine and turbine tests.

MR. FERNOW

*M. E. 39, 40.—Mechanical Laboratory—*Semesters 1 and 2
(0 and 2) $2\frac{2}{3}$ cr.

Prerequisite: Physics 22, 24.

Calibration of thermometers, gauges, study and use of indicators, calibration of nozzles and wiers and tests of simple hydraulic machinery. Analyses of coal and gas, tests of lubricating oils. Simple engine tests.

MR. FERNOW MR. SAMS

*M. E. 41.—Mechanical Engineering—*Semester 1 (3 and 0) 3 cr.

Prerequisite: M. E. 35, 36.

A study of the steam turbine and power plant equipment.

MR. CARPENTER

*M. E. 43, 44.—Mechanical Laboratory—*Semesters 1 and 2
(0 and 4) $1\frac{1}{3}$ cr.

Prerequisite: M. E. 39, 40.

Efficiency and economy of steam engine, turbines, internal combustion engines, condensers, pumps, refrigerating machinery. In this course the heat balance of power plants is taken up and tests are made on equipment at power station and pumping stations.

MR. EARLE

*M. E. 45.—Mechanical Laboratory—*Semester 1 (0 and 2) $2\frac{2}{3}$ cr.

Prerequisite: M. E. 31, 32.

Efficiency and economy tests, steam engines, steam turbines, boilers, gas engines, pumps, condensers, refrigerating machinery, etc.

MR. FERNOW MR. CARPENTER

*M. E. 46.—Gas Engines—*Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 38, or M. E. 38.5.

Thermodynamics of the internal combustion engine, study of fuels, combustion, ignition, efficiency and economy.

MR. EARLE

M. E. 47, 48.—Power Plants—Semesters 1 and 2 (3 and 0) 3 cr.

Prerequisite: M. E. 38.5.

A critical study of fuels and combustion, heat balance, power plant equipment including steam boilers, prime movers and their auxiliaries.

MR. EARLE

M. E. 49.—Heat and Ventilation—Semester 1 (2 and 0) 2 cr.

Prerequisite: M. E. 38 or M. E. 38.5.

Principles of heat and ventilation, hot-air, steam and hot water heating systems; methods of ventilation.

MR. CARPENTER

M. E. 50.—Refrigeration—Semester 2 (2 and 0) 2 cr.

Prerequisite: M. E. 37, 38 or M. E. 35, 36.

Theory of refrigeration, study of the types of ice making and refrigerating machinery. Management and economy of plants.

MR. EARLE

M. E. 51.—Mechanics of Materials—Semester 1 or 2 (3 and 0) 3 cr.

Prerequisite: M. E. 31, or 37.

A study of the various buildings and structural materials as regards strengths in refitted joints, beams and columns. Particular reference to be given to the analysis of the various strengths in all types of beams.

Text-book: *Strength of Materials*—Boyd.

MR. TUCKER MR. STEVENSON

M. E. 53, 54.—Design—Semesters 1 and 2 (0 and 2) 2/3 cr.

Prerequisite: Drawing 32; M. E. 35, 36.

An analytical and graphical study of the fundamental principles of construction of various classes of machinery such

as steam engines, pumps, steam turbines, etc., by the solution of certain problems in design.

MR. CARPENTER

*M. E. 55, 56.—Industrial Arts—*Semesters 1 and 2 (0 and 2)
2/3 cr.

A course designed for students who wish to teach. Special emphasis is laid on good form in the use of tools and machinery. A part of the course is devoted to policies and practices in organization, administration and supervision of industrial courses.

MR. MARSHALL

MR. JOHNSON

MR. FREEMAN

MILITARY SCIENCE

MR. COLE

MR. PENROSE. MR. LIPSEY MR. JOHNSTON MR. JOHNSON

MR. BALCAR MR. STERN MR. NARAMOR MR. FOWLER

*M. S. 11, 12.—Military Science and Tactics—*Semester 1
(0 and 3) 1 cr. Semester 2 (1 and 2) 1 2/3 cr.

This course includes the theory and practice of rifle marksmanship, hygiene and first aid, physical exercise for the correction of defects in posture, and lessons in command and leadership and military courtesy.

Text-book: *National Service R. O. T. C. Manual, Vol I.*

MR. JOHNSON

MR. FOWLER

MR. NARAMOR

*M. S. 21, 22.—Military Science and Tactics—*Semester 1
(0 and 3) 1 cr. Semester 2 (1 and 2) 1 2/3 cr.

Prerequisite: Military Science 12.

This course consists of instruction in command and leadership, the duties of junior leaders, in drills, ceremonies, guard duty in field and garrison, use of the automatic rifle, musketry and scouting and patrolling.

Text-book: *National Service R. O. T. C. Manual, Vol. II.*

MR. JOHNSON

MR. STERN

M. S. 31, 32.—Military Science—Semesters 1 and 2 (0 and 3)
1 cr.

Juniors who are not members of the R. O. T. C. receive practical instruction in military science. Members of the R. O. T. C. also take M. E. 33 and 34.

MR. LIPSEY MR. JOHNSTON

M. S. 33, 34.—Military Science and Tactics—Semester 1
(2 and 0) 2 cr. Semester 2 (3 and 0) 3 cr.

Prerequisite: Military Science 22.

This course consists of instruction in the use of standard and special maps, map distances and elevations, and in the making of special maps by improvised methods. It also includes studies of field engineering and combat principles, detailed study of the machine gun, and further study in command and leadership, particularly training and application in the more advanced duties of non-commissioned officers in drill and ceremonies.

Text-book: *National Service R. O. T. C. Manual, Vol. III.*

MR. COLE

M. S. 43, 44.—Military Science and Tactics—Semester 1
(2 and 0) 2 cr. Semester 2 (3 and 0) 3 cr.

Prerequisite: Military Science 34.

This course comprises the study of infantry weapons, military history and the National Defense Act, administration and military law, the rules of land warfare, combat principles and tactics, the duties of commissioned officers in command of the platoon and company.

Text-book: *National Service R. O. T. C. Manual, Vol. IV.*

MR. PENROSE MR. BALCAR

M. S. 41, 42.—Military Science—Semesters 1 and 2 (0 and 3)
1 cr.

Seniors who are not members of the R. O. T. C. receive

practical instruction in military science. Members of the R. O. T. C. also take M. S. 43 and 44.

MR. COLE

Class Rooms and Equipment.—The military department has three class rooms and an armory for the storage of equipment. Class rooms are completely equipped with sand tables, drawings, charts and maps for the instruction of the individual class. In addition to the essential equipment for the individual the College has machine guns, 37 mm. guns and trench mortars, automatic rifles, all loaned by the government. Equipment required for class use, such as drawing boards, paper, pamphlets, etc., are furnished the student.

MODERN LANGUAGE

MR. RHYNE

French 11, 12.—*Beginner's French*—Semesters 1 and 2
(3 and 0) 3 cr.

A beginner's course in French; the fundamentals of grammar with emphasis on pronunciation and the learning of idioms, conversation and dictation. In the second semester a reader will be used.

MR. RHYNE

French 21, 22.—*Second-year French*—Semesters 1 and 2
(3 and 0) 3 cr.

Review of grammar, with especial attention to irregular verbs. Conversation and dictation continued. Prose readings from such authors as Balzac, Daudet, Dumas, Hugo, Loti, Maupassant and Merimee.

MR. RHYNE

French 31, 32.—*Scientific Reading*—Semesters 1 and 2 (3 and 0)
3 cr.

The authors for reading are selected according to the subject in which the students are most interested.

MR. RHYNE

German 11, 12.—Beginner's German—Semesters 1 and 2
(3 and 0) 3 cr.

The essentials of German grammar. Stress is laid on pronunciation, conversation, and drill in the fundamental constructions. Dictation is given throughout the year. In the second semester an elementary reader is used.

MR. RHYNE

German 21, 22.—Second-year German—Semesters 1 and 2
(3 and 0) 3 cr.

Review of grammar. Conversation and dictation continued. Easy lectures in German. Prose readings from such authors as Baumbach, Freytag, Hauff, Storm and Wildenbruch.

MR. RHYNE

German 31, 32.—Semesters 1 and 2 (3 and 0) 3 cr.

Rapid readings in German prose, literary and scientific. A survey of the work of some of the greatest Germans in the fields of letters and science.

MR. RHYNE

Spanish 11, 12.—Beginner's Spanish—Semesters 1 and 2
(3 and 0) 3 cr.

The essentials of grammar. Pronunciation and drill in the common idioms. Toward the end of the first semester the reading of Spanish texts will be taken up. For the whole of the second semester students taking the course will be expected to subscribe for at least two days a week to the Spanish Daily La Prensa.

MR. RHYNE

MUSIC

MR. TOWNSEND

Music 11, 12.—Sight Singing—Semesters 1 and 2 (0 and 2)
1 cr.

A course designed to teach the reading of notes.

MR. TOWNSEND

*Music 21, 22.—Sight Singing—*Semesters 1 and 2 (0 and 2)
1 cr.

Those students who have completed Music 11, 12, or who have previously studied music elsewhere, may continue their studies in this course.

MR. TOWNSEND

*Music 31, 32.—Theory—*Semesters 1 and 2 (2 and 0) 2 cr.

The purpose of this course is to teach the fundamental principles of theory and harmony, and an appreciation of some of the great masters.

MR. TOWNSEND

PHYSICAL EDUCATION

MR. GEE

MR. CODY

MR. CARSON

MR. MCLEOD

*P. E. 11, 12.—*Semesters 1 and 2 (0 and 2) 2/3 cr.

Physical training is required of all first year students; one two-hour period per week. Physical Education 11 will be devoted to such athletic activities as will contribute to the health and physical welfare of each freshman. The work consists of gymnastics and competitive games.

Election of specialized sports—football, baseball, basket ball, track, swimming—may be made by all cadets who have required standard of physical development.

Corrective gymnastics will be made an important part of the course.

MR. GEE MR. CODY

PHYSICS

MR. GODFREY

MR. BROWN

MR. REED

MR. RAWLINSON

*Physics 11, 12.—General Physics—*Semesters 1 and 2 (3 and 2)
4 cr.

Prerequisite: Algebra, through Quadratics, Plane Geometry.

A course for engineering students covering the fundamental principles of physics in mechanics, heat, magnetism, electricity, and light as given in the text. In the laboratory elementary quantitative experiments in these subjects are assigned. Carefully prepared reports are required. Mimeographed notes are used as a guide, but the student is expected to develop correct methods of observation, make accurate records and present clear, concise reports. Curve plotting is given special attention.

Text-book: *A Textbook of Modern Physics*—Weld and Palmer.

MR. GODFREY MR. REED MR. RAWLINSON

Physics 13, 14.—General Physics—Semesters 1 and 2 (3 and 2)
4 cr.

Covers the same subjects as the preceding course but more attention is given to molecular physics and light, and less detailed study is made in mechanics and electricity. There are some changes in the topics covered in the laboratory course, but the same general plan is used.

Text-book: *Physics*—Stewart.

MR. BROWN MR. REED

Physics 21.—Mechanics and Light—Semester 1 (3 and 0) 3 cr.

Prerequisite: Physics 11, 12, Mathematics 11, 12.

An introductory course to the work in the engineering courses that follow. Notes on lectures are required, and much problem work is given.

Text-books: *Problems in Physics*—Henderson. *Modern Physics*—Weld and Palmer.

MR. BROWN

Physics 22.—Electricity and Magnetism—Semester 2 (3 and 0)
3 cr.

A continuation of the preceding course with a study of

electricity and magnetism. A thorough study of direct current circuits is made and many practical problems are solved.

Text-book: *Electrical Engineering*—Vol. 1—Dawes.

MR. BROWN

Physics 23, 24—Laboratory Physics—Semesters 1 and 2
(0 and 2) 1 cr.

An advanced laboratory course in which modern experimental methods are used in the measurement of several physical constants. The operation of electrical measuring instruments for direct currents is studied and some circuit tests are given.

Text-book: Mimeographed Notes.

MR. GODFREY MR. BROWN MR. REED

Physics 25, 26.—Mechanics, Electricity, Magnetism and Light—
Semesters 1 and 2 (2 and 0) 2 cr.

A course in the civil engineering curriculum similar to Physics 21, 22, but covering only the essentials to this curriculum. Notes on lectures are required and problem work is assigned. It is taken in connection with laboratory course 23, 24; but some changes are made in the topics studied in the laboratory.

Text-book: *Problems in Physics*—Henderson. *Modern Physics*—Weld and Palmer.

MR. GODFREY MR. REED

Physics 29.—General Physics—Semester 1 (2 and 2) 2 2/3 cr.

A course offered to students in agriculture including a laboratory study of fundamental principles that are applied in this field. Carefully prepared reports are required and references to standard works are assigned for outside study. As far as possible topics for the experiments are chosen by the students. Smith's *Elements of Applied Physics* is used regularly for reference.

MR. REED

Physics 31, 32.—Advanced Physics—Semesters 1 and 2 (2 and 2) 3 cr.

A course planned to give the student some information regarding more recent developments and methods in physics and the results of recent investigations. Some experiments and demonstrations in the physics of the electron are included.

MR. BROWN

Physics 33.—Elementary Descriptive Astronomy—Semester 1 (2 and 0) 2 cr.

Prerequisite: General Physics.

A brief course based upon the text, and repeated during the second semester.

Text-book: *Astronomy*—John Charles Duncan.

MR. GODFREY

POULTRY HUSBANDRY

MR. MORGAN

P. H. 12.—Elementary Poultry Husbandry—Semester 2 (1 and 2) 1 2/3 cr.

A study of the general principles of poultry production, including the importance and scope of the industry, incubation, brooding, housing, feeding, flock management and parasites and diseases.

MR. MORGAN

P. H. 41.—Poultry Husbandry—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: P. H. 12.

In this course culling, judging, selection and breeding of poultry will be taken up. The students will receive instruction and training in judging both from the standpoint of production and the show ring. The selection and mating of breeding stock will be emphasized. Students pursuing this course should have completed genetics or be taking it at the time.

MR. MORGAN

P. H. 42.—Farm Poultry—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: P. H. 12.

Incubation, brooding, feeding, housing, and management of poultry will be taken up in this course. Students will be given opportunity to operate incubators and to do actual work in the brooding of chicks. Feeding methods and practices will be studied in detail. A detailed study of poultry farm management will be included in this course. This course should follow Poultry Husbandry 41.

MR. MORGAN

TECHNOLOGY OF FABRICS

MR. CHEATHAM*

MR. MCKENNA

MR. CARTEE**

T. F. 12.—Textiles—Semester 2 (1 and 2) 1 2/3 cr.

A continuation of the work given the first semester (Y. M. 11) with some emphasis on fabric construction. The object of the course is to give the student a general back ground for the work which follows as well as to see the industry as a whole. The student will take up a few typical skills. He will also study the duties of weaver, loom fixer, second hand and overseer of weaving.

MR. MCKENNA MR. CARTEE

T. F. 21.—Fabric Construction—Semester 1 (2 and 0) 2 cr.

A study of yarns used in fabrics; yarn calculation; classes of textile fabrics; classes of woven fabrics; method of representing weaves; weaves used in standard fabrics; diameters of yarns; maximum ends and picks per inch; effect of yarn twist; shrinkage and take-up; reed calculations; air space and ends per cent in reeds; cloth calculations.

Text-book: *Technology of Textile Design*—Posselt.

MR. MCKENNA MR. CARTEE

*On leave—Cotton Technologist U. S. D. A.

**Temporary appointment.

T. F. 22.—Elementary Design—Semester 2 (2 and 0) 2 cr.

Prerequisite: Technology of Fabrics 21.

Production of designs representing derivative twills and satins, honeycombs, mock leno, granites, crepe, bedford cords, double cloth, pique, corduroy, velvet, and extra warp design; extra selvage motions, cam designing and top riggings.

Text-book: *Technology of Textile Design*—Posselt.

MR. MCKENNA MR. CARTEE

T. F. 23.—Weaving—Semester 1 (0 and 2) 2/3 cr.

Instruction in the operation of automatic and non-automatic looms; drawing in warps; warping, winding and slashing.

Text-book: I. C. S. on Slashers and Warpers.

MR. CARTEE

T. F. 24.—Weaving Loom Fixing—Semester 2 (0 and 2) 2/3 cr.

A systematic study of the motions of a loom; setting and timing the parts with particular reference to economy in power and supplies; mutiple cam setting and production calculations.

Text-book: *Practical Loom Fixing*—Nelson.

MR. CARTEE

T. F. 31.—Dobby Design—Semester 1 (2 and 0) 2 cr.

Prerequisite: Technology of Fabrics 21, 22.

A study of pattern styles; method of combining two or more weaves; ratio of construction for different weaves in patterns; laying out designs when either “ground” or “overall” is given; drawing in and chain drafts and reed plans; reed, harness and warp calculations. Each student is required to produce ten designs from sketches and cloth specifications.

MR. MCKENNA

T. F. 33, 34.—Fabric Analysis—Semesters 1 and 2 (0 and 2) 2/3 cr.

Prerequisite: Technology of Fabrics 21, 22.

Methods of distinguishing between cotton, wool, silk and linen; finding per cent of different fibers in fabrics; determining amount of size in fabrics; methods of finding yards per pound from small samples; over-all and ground constructions; per cent of warp and filling; warp and filling numbers; finding weave and looming plans. Each student is required to analyze six samples the first semester and ten the second semester.

Required equipment: No. 607 Steel Rule; 1" Pick Glass; Pick Needle.

MR. CARTEE

T. F. 35.—Fancy Weaving—Semester 1 (1 and 2) 1 2/3 cr.

A combination of practical weaving and loom fixing on dobbies and box looms; a study of dobbie harness setting for various types of patterns; a detailed study of dobbies and box motions, and practice in building dobbie and box pattern chains.

Text-book: I. C. S. on Dobbies; Box Motions; Northrop Looms; Slashers; and Warpers.

MR. CARTEE

T. F. 36.—Fancy Weaving—Semester 2 (0 and 2) 2/3 cr.

Prerequisite: Technology of Fabrics 11, 12, 13.

A continuation of the study of machinery relating to fancy weaving, such as two-weave motion, two cylinder dobbies, multipliers, and automatic box looms.

MR. MCKENNA

T. F. 38.—Dobby Design—Semester 2 (2 and 0) 2 cr.

Prerequisite: Technology of Fabrics 22, 24, 31.

A continuation of the principles relating to dobbie design as found in technology of fabrics 31. Students will have to make

up designs from sketches drawn to scale. Design fabrics similar to samples but of different construction and weights.

MR. MCKENNA

T. F. 41.—Leno Design and Warp Preparation—Semester 1
(2 and 0) 2 cr.

A study of warping and slashing for gray goods; size mixtures; humidity requirements; color in fabric production; methods of dressing colored warps; loom beam dressing and warping layouts for colored warps; cross weaving on cord and steel douds.

Text-books: I. C. S. on Leno Weaves & Leno Attachments.

MR. MCKENNA

T. F. 42.—Jacquard Design—Semester 2 (2 and 4) 3 1/3 cr.

A study of the different types of jacquard machines; types and methods of harness building; laying out designs for different tie ups; card cutting and lacing; method of repeating and machine lacing. Each student will be required to make one design for a specified tie up and to prepare cards therefrom.

Text-book: I. C. S. on Jacquards.

MR. CARTEE

T. F. 43.—Weave Room Methods—Semester 1 (3 and 0) 3 cr.

Organization and laying out of weave room machinery; system of keeping records on typical styles of fabrics; cost finding for different types of fabrics; general weave room management.

General management of weaving mills, including organization and laying out of weaving room and preparatory machinery, cost finding.

MR. MCKENNA

T. F. 45, 46.—Pattern Weaving—Semesters 1 and 2 (0 and 2)
2/3 cr.

Practice in putting on dobby, box, and jacquard patterns

which have been worked out by the students in courses 31, 41, 42.

MR. MCKENNA

T. F. 48.—Knitting—Semester 2 (0 and 2) 2/3 cr.

A study of flat and circular machines; spring and latch needles; gauge and needles per inch; functions of all parts of machines; narrowing and widening; splicing and reinforcing; yarns for different gauges; yarn changes, building pattern chain for hose and half hose; transferring and looping, rib knitting; changing the stitch; finishing the hosiery.

MR. MCKENNA

T. F. 50, 51.—Project in Weaving—Semesters 1 and 2, 1 cr.*

Prerequisite: Technology of Fabrics 42, 46, 48.

A selection and study of some fabric to be duplicated, this fabric to be designed, dressed, and woven by the students. Hours as arranged. To be elected with approval of director and instructor.

Division Rooms and Equipment.—The equipment for this division occupies three rooms on the top floor of the textile building, and in addition one office and two class rooms.

Knitting Room.—One “K” model Scott and Williams 220 needle hosiery machine; one Hemphill 200 needle “Banner” hosiery machine; one Brinton 176 needle ribber; one Jenckes 176 needle hosiery machine; one Wright Steady Dial looper; one 16-bobbin circular braider; one 13-bobbin flat braider; two Merrow overseaming machines; one 220 needle Banner knitting machine; 14 Gerhardt Hand Knitters.

Warping and Winding Room.—One Davis and Furber dressing machine; one Entwistle beamer; one Draper ball warper; one Draper beam warper; one Lowell Machine Shop single cylinder slasher; one jack spooler; one Altemus quiller; one Payne skein winder; one Steele 2-drum quiller; one 4-spindle Universal “Leeson” No. 90 quiller; 1 12-Spindle No. 90 Universal Winder, motor drive.

NOTE*—T. F. 50-51 may be combined with Y. M. 50-51 to make a Mill Project.

Weave Room.—One 28-inch Draper loom, 20 harness dobby; one 40-inch Draper loom, 16 harness dobby; two 40-inch Draper looms; two 28-inch Draper looms, steel harness; one 28-inch Draper loom, two harness; one 28-inch Draper loom, multiple cams and extra selvage motion; one Crompton & Knowles, 30-inch, 2 by 1 automatic box loom; one Crompton & Knowles, 30-inch loom, 2 by 2 box, and 16 harness dobby; one Crompton & Knowles 40-inch “gem” loom, 4 by 4 box and 25 harness dobby; one Crompton & Knowles Dobby Silk, 60-inch, 25 harness, 4 by 4 box, motor drive; one Crompton & Knowles automatic dobby dress goods, 40-inch, 25 harness, 4 by 1 box, Leno motion, motor drive; one Crompton & Knowles 30-inch loom, 20 harness dobby and Leno motion; one Crompton & Knowles 30-inch, 4 by 1 box loom with 20 harness dobby and Leno motion; one Crompton & Knowles 26-inch Terry towel loom, 3 by 1 box and 16 harness dobby; one Crompton & Knowles, 26-inch Terry towel loom, 2 by 1 box, 16 harness dobby, double cylinder and rocking cylinder motion, positive Terry let-off mechanism; one Crompton & Knowles 64-inch damask loom, 4 by 1 box and 624 hook jacquard; one Crompton & Knowles narrow fabric loom with 416 hook jacquard; one Crompton & Knowles 40-inch loom with 624 hook jacquard; one Crompton & Knowles 30-inch loom with 424 hook Holton jacquard; one Stafford 40-inch, shuttle changing loom, two harness; one Stafford 40-inch, bobbin changing loom, two harness; one Stafford 40-inch, bobbin changing loom, four harness; one Stafford bag loom; one Stafford shuttle changing loom with 624 hook Crompton & Knowles jacquard; one Hopedale, 40-inch automatic loom; one Hopedale automatic loom, multiple harness; one Whitin, 40-inch, plain loom, one Whitin, 27-inch medium duck loom, one Whitin, 40-inch loom, 20 harness dobby; one Kilburn & Lincoln, 36-inch plain loom; one 14-inch hand loom, 25 harness dobby; one Royle French index, piano, card cutting machine; four drawing-in frames, and complementary supply of reeds, combs, harness and pick gears; one extra dobby cylinder motion.

TEXTILE CHEMISTRY AND DYEING

MR. MULLIN

T. C. 31.—Organic Chemistry—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Chemistry 11, 12.

After a general introduction a detailed study of the aliphatic series follows; including constitutional and structural theory. Some attention will be given to the history of organic chemistry.

The laboratory work consists of the preparation of one or more organic compounds illustrating each group. Some time is also given to qualitative organic analysis. Special attention is given to the proper setting up and manipulation of apparatus.

MR. MULLIN

T. C. 32.—Organic Chemistry—Semester 2 (2 and 2) 2 2/3 cr.

Prerequisite: Text. Chem. 31.

The aromatic series of organic compounds is studied, special prominence being given to the structure and preparation of synthetic dyestuffs and of the intermediate compounds from which they are made.

In the laboratory typical aromatic compounds illustrative of each group as well as a number of intermediates and dyestuffs are prepared.

MR. MULLIN

T. C. 41.—Organic Chemistry—Semester 1 (2 and 2) 2 2/3 cr.

Prerequisite: Chemistry 11, 12; Text. Chem. 31, 32.

The manufacture, use, and technical analysis of the more important chemicals and other compounds used in the textile industry are studied.

The laboratory work in connection therewith consists of the preparation and analysis of some of the chemicals and other products most commonly used.

MR. MULLIN

T. C. 42.—Dyeing—Semester 2 (0 and 4) 1 1/3 cr.

Prerequisite: Text. Chem. 41.

A course including the bleaching, dyeing, mercerizing, and printing of cotton. Some attention is also given to the dyeing of wool and of silk. The more important mordants are prepared and applied, and experiments illustrating the properties and uses of gums, starches and chemicals used in the textile industry are made. Then follows color matching and the identification of dyes on the fiber. A brief discussion of the physical and chemical principles involved precedes the laboratory work of each period.

MR. MULLIN

Division Rooms and Equipment.—The work in textile chemistry and dyeing is carried on in an experimental laboratory and dyehouse.

The experimental laboratory has accommodation and apparatus for thirty students. The desks are supplied with gas, water, drawers, and lockers. The dyehouse equipment comprises one Schaum and Uhlinger self-balancing hydro-extractor; one model vacuum dyeing machine with steam engine attached; one Birch sample dyeing machine; one calico printing machine; one Butterworth jigger; one Psarski dyeing machine; one Franklin dyeing machine; one Hussong dyeing machine; one mercerising machine for yarns; one steaming and ageing box; jacketed copper kettles.

VETERINARY SCIENCE

MR. FEELEY

Vet. 30.—Anatomy and Physiology—Semester 2 (2 and 0)
2 2/3 cr.

A study of anatomy, physiology of digestion, farm sanitation, common diseases, and first aid treatment especially arranged for agricultural students.

The course in anatomy, which is arranged as an introduction to the study of physiology of digestion and stock judging,

includes the study of skeletons and the principal articulations, muscles of locomotion and the organs of circulatory, respiratory, digestion, and urinary apparatus. Skeletons, models, and charts are used in this course. The physiology of digestion treats of the chemical and physical processes by which food is made soluble and capable of absorption. Farm sanitation deals with sanitary conditions and with the fundamentals in the control of contagious and infectious diseases. The common diseases and first aid treatment of farm animals are also studied.

Text-book: *Veterinary Science*—Hadley.

MR. FEELEY

Vet. 41.—Diseases of Animals—Semester 1 (2 and 2) 2 2/3 cr.

This course covers the principles of etiology, pathology, diagnosis, and treatment of the various diseases of domestic animals.

MR. FEELEY

YARN MANUFACTURE

MR. EATON

MR. LEE

Y. M. 11.—The Textile Industry—Semester 1 (1 and 2) 1 2/3 cr.

The purpose of this course is to introduce the student to the textile industry through study and discussions on organization, employment, promotion, and the economic importance of the industry and its related fields. The class work may be supplemented by visits to mills. Some periods will be used for a study of certain skills. The student will make a study of the duties of machine tenders, section men and foremen in the picker room, card room and spinning room.

MR. EATON MR. LEE

Y. M. 21.—Pickers—Semester 1 (2 and 2) 2 2/3 cr.

Opening and mixing cotton; study of bale breakers, automatic feeders, intermediate and finisher lappers; various styles of openers, setting and adjusting same; cleaning trunks, different kinds of beater, screens, fans, calendar rolls, evener motion and measuring motion; calculation for drafts, production,

speeds, etc.; practice operating pickers and cleaning machinery.

Text-book: *Cotton Yarn Manufacture*—Winchester.

MR. EATON MR. LEE

Y. M. 22.—*Cards and Drawing Frames*—Semester 2 (2 and 2)
2 2/3 cr.

A study of the revolving flat card, principal parts, striping, clothing, grinding, brushing, and settings; calculations for speeds, production, waste, draft, and constants for same; setting of metallic and leather covered rolls on the drawing frame; care and varnishing leather covered rolls, calculation for speeds and drafts. Practice operating cards, drawing frames, and other machinery.

Text-book: *Cotton Yarn Manufacture*—Winchester.

MR. EATON MR. LEE

Y. M. 31.—*Roving Frames*—Semester 1 (2 and 2) 2 2/3 cr.

The construction and operation of roving frames, study of the slubber, intermediate, roving frame, and jack frame; the different styles of top rolls used and the method of weighting them; making necessary calculations for draft, twist, tension, lay, taper and constants for same; production per spindle and sizing the roving, turns per inch for different hanks.

Practice operating roving frames.

Text-book: *Cotton Yarn Manufacture*—Winchester.

MR. EATON

Y. M. 32.—*Cotton Grading, Doubling and Drafting*—Semester 2
(2 and 2) 2 2/3 cr.

Classing of cotton according to U. S. Government standards for grades, tinges, and stains; stapling of cotton, study of Sea Island, Egyptian, and all grades of cotton raised in the United States; methods of ginning, marketing, contracts for cotton, receiving and handling cotton at mills, and claims.

Calculation for draft, production, weights, and number of

machines required for different counts, labor costs, and production of yarn from picker to spinning frame inclusive.

Text-book: Notes and Government Bulletins.

MR. LEE

Y. M. 41.—*Spinning, Spooling and Twisting*—Semester 1
(3 and 2) 3 2/3 cr.

Construction and principal parts of spinning spooling machines, such as builder motions, travelers, rolls and creels. Calculations on twisting, drafting, doubling, and constants; wet and dry twisting, amount of twist in different ply and coarse yarns, balanced twist, and thread; size of rings, steel and brass travelers for different counts; calculation for same.

Practice operating spinning and spooling machines.

Text-book: *Cotton Yarn Manufacture*—Winchester.

MR. EATON

Y. M. 42.—*Combers, Sliver Lap, and Ribbon Lap*—Semester 2
(1 and 2) 1 2/3 cr.

Construction, setting, and adjustment of sliver lap and ribbon lap machines; calculations for draft and production of the same; study of comber, timing, setting for different staples of cotton and production of waste; operation and management of combers and all necessary calculations.

Practice in operating the sliver lap, ribbon lap, and comber machines; also in running test lots of cotton through the different machines.

Text-book: *Cotton Yarn Manufacture*—Winchester.

MR. LEE

Y. M. 44.—*Mill Economics*—Semester 2 (2 and 0) 2 cr.

The character of this course is descriptive rather than theoretical. Its purpose is to explain the principles of economics as applied to general management. This includes the labor of cost of production in the various departments, wages and labor

conditions, care of mill and mill village. Students will report in class on articles assigned them in technical books and periodicals.

MR. EATON

*Y. M. 50, 51.—Project in Spinning**—Semesters 1 and 2, 1 cr.

Prerequisites: Y. M. 21, 22, 31.

Warp and filling yarns to be produced from raw stock and complete tests to be made in testing laboratory. Time as arranged.

To be elected with approval of the director and instructor.

MR. EATON

Division Rooms and Equipment

Picker Rooms. Pickers—One Atherton automatic feeder; one Atherton breaker lapper; one Atherton finisher lapper.

Card Room. Cards—One Mason 40-inch revolving top flat card for demonstration, one Woonsocket Machine Co., revolving top flat card. Two Saco and Pettee 40-inch cards.

Combing.—One Whitin sliver lapper; one Whitin four head, ribbon lapper, one eight head, Whitin high speed comber.

Drawing Frames.—Two Saco and Pettee drawing frames, four deliveries, stop motions, metallic rolls; one Whitin drawing frame, four deliveries, leather covered rolls; one Woonsocket drawing frame, four deliveries, metallic rolls.

Fly Frames.—One Saco and Pettee 12 x 6 inch, 40 spindle slubber, one Saco Pettee 8 x 4 inch, 64 spindle intermediate, one Saco and Pettee 6 x 3 inch 80 spindle, fine roving frame, one slubber 60 spindles Saco Lowell, one intermediate 72 spindles Saco Lowell, one new Woonsocket fine frame 80 spindles, one Woonsocket 6 x 2½ inch, 96 spindle jack roving frame.

Ring Spinning.—One Saco and Pettee spinning frame, 128 spindles; one Mason spinning frame, 112 spindles; 30 Fales

*Y. M. 50, 51, may be combined with T. of F. 50, 51 to make a Mill Project.

and Jenks spinning frames, 80 spindles each; two Whiting spinning frames, 80 spindles each. One H. & B. 80 spindle, spinning frame.

Spooling.—Two Draper spoolers 40 spindles each; one 24 spindle Easton and Burnham spooler.

Twisting.—One Draper combination wet and dry twister, 48 spindles; two Fales and Jenks wet twisters, 70 spindles each.

Winding.—One universal winder and doubler; one Foster cone and tube winder.

Reeling.—One Draper 54 inch reel, 50 spindles.

Testing Laboratory. — One Alfred Suter direct yarn counter; one Alfred Suter twist counter; Brown and Sharpe roving reel, yarn scales and weights; Henry L. Scott yarn and cloth tester, two yarn reels, motor driven; Moscrop single strand tester; Emerson conditioning oven; Torsion balance yarn calculating scales and necessary accessories. Mullens Tester.

ZOOLOGY AND ENTOMOLOGY

MR. SHERMAN

MR. DUNAVAN

MR. WALLIS

Z. & E. 11.—General Zoology—Semester 1 (3 and 2) 3 2/3 cr.

The fundamentals of structure and life processes of animals with a survey of the animal kingdom. For academic and pre-medical students.

Text-book: *Outlines of General Zoology*—Newman.

Laboratory Manual: *Laboratory Manual of Zoology*—Hyman.

MR. DUNAVAN

MR. WALLIS

Z. & E. 22.—General Zoology—Semester 2 (2 and 2) 2 2/3 cr.

The fundamentals of structure and life processes of animals and a survey of the animal kingdom with reference to economic groups, to lay a foundation for the special courses pertaining to agriculture which follow.

Text-book: *Outlines of General Zoology*—Newman.

Laboratory Manual: *Laboratory Manual of Zoology*—Hyman.

MR. DUNAVAN MR. WALLIS

Z. & E. 31.—*General and Applied Entomology*—Semester 1
(2 and 2) 2 2/3 cr.

Prerequisite: Zoology 22.

Structure, development, habits, and groups of insects with reference to economic forms and their control.

Text-book: *Applied Entomology*—Fernald.

MR. DUNAVAN MR. WALLIS

Z. & E. 32.—*Advanced General Entomology*—Semester 2
(2 and 2) 2 2/3 cr.

Prerequisite: Entomology 31.

A comprehensive study of the orders and families of insects, and morphology from taxonomic view point; life-history, adaptations, ecological relationships; also practice in collecting, preserving, mounting and labelling specimens for permanent collections.

Text-book: *Introduction to Entomology*—Comstock.

MR. DUNAVAN

Z. & E. 41, 42.—*Economic Entomology*—Semesters 1 and 2
(2 and 2) 2 2/3 cr.

Prerequisite: Entomology 31.

First semester covers study of insects of field crops, livestock, stored products, and of the household, with control measures; observations in the field.

Second semester covers study of insects of the orchard, garden, and greenhouse and general truck crops; observations in the field. Practice is given in making and applying insecticides.

Text-book: *Injurious Insects*—Herrick.

MR. DUNAVAN MR. WALLIS

Z. & E. 43.—*Insects of Forest and Shade Trees and Ornamentals*.—Semester 1 (2 and 3) 3 cr.

Prerequisite: Entomology 31.

A study of the more important insects attacking forest, shade and ornamental trees and shrubs, including life-histories and control measures. The laboratory periods are devoted largely to observing and collecting in the field and forest.

Text-book: *Manual of Free and Shrub Insects*—Felt.

MR. SHERMAN

Z. & E. 44.—*Beekeeping*—Semester 2 (2 and 2) 2 2/3 cr.

An introduction to the scientific and economic phase of beekeeping. The college apiary affords opportunity for information and experience in production of both comb and extracted honey.

Text-book: *A. B. C. and X. Y. Z. of Beekeeping*—A. I. Root.

MR. SHERMAN

Z. & E. 45.—*Insect Morphology*—Semester 1 (2 and 2)
2 2/3 cr.

Prerequisite: Entomology 31.

A study of external and internal anatomy of insects; includes a limited amount of general and histological technique.

Laboratory Manual: *The Anatomy of Insects*—Comstock and Kellogg.

Reference: *Introduction to Entomology*—Comstock.

MR. DUNAVAN

Z. & E. 46.—Systematic Entomology—Semester 2 (1 and 4)
2 1/3 cr.

Prerequisite: Entomology 31.

Identification of insects in certain groups to genera and species,—sketches of certain economic species; structural adaptations to modes of life; review of certain important families; practice in collecting and preserving specimens.

References: Volumes and Papers from College and Division Libraries.

MR. SHERMAN

Z. & E. 47.—Animal Parasitology—Semester 1 (2 and 2)
2 2/3 cr.

Prerequisite: Entomology 31.

A review of animal parasites in the transmission of disease and relation to health of man and animals, including laboratory and field practice in biology and sanitation.

Text-book: *Animal Parasites and Human Diseases* — Chandler.

MR. WALLIS

Z. & E. 48.—Ornithology—Semester 2 (0 and 3) 1 cr.

Prerequisite: Zoology 11 or 22.

Field and laboratory study of birds, keeping lists of those identified; consideration of the species, their habits, and relations to human welfare.

References: *Birds of Eastern North America*—Chapman.
Birds of South Carolina—Wayne.

MR. SHERMAN

Z. & E. 51, 50.—Thesis and Problems—Semesters 1 and 2
(1 and 0) 1 cr.

Prerequisite: Entomology 31.

A study of modern entomological and zoological problems

and methods, on the seminar or round-table basis; all members of staff and advanced students participating.

MR. SHERMAN MR. DUNAVAN MR. WALLIS

In exceptional cases credit may be granted on work in preparing a thesis as part of the graduation requirements, and as part of the requirements for civil service examination. The amount of credit will depend upon the nature of the problem, and amount and quality of work done.

Division Quarters and Equipment

General Laboratory and Lecture Room—This large and well-lighted room is on the first floor of the library building and has standard laboratory tables and lockers; with microscopes, lantern, microtome, and other equipment.

Divisional Offices—Located on first floor library building near the laboratory and lecture room. Here are kept the files, records and library of the division.

Insecticide Laboratory—A large room on first floor of library building used for instruction and practice in preparation of standard insecticides, and for research in insecticide problems. Used by both college and experiment station.

Research Laboratory—A large room on first floor of library building; with equipment for research, photography, etc.; used especially for work of experiment station.

Beekeeping Laboratory—A small frame building about one-fifth mile northwest of library, which is used for work in beekeeping, with equipment for instruction and practice, and with an apiary in the yard.

Aquarium and Vivarium—Arrangements are under way for equipping a commodious brick building of two large rooms, with running water, tanks, pool, and other facilities for living animals, both aquatic and terrestrial. It is intended that work-tables, shelves, etc., will provide for rougher laboratory work and storage of large specimens.

SUMMER SCHOOL

The summer school is a regular part of the service offered the state. The summer session for 1928 will open June 13th and will close July 25th. During this period instruction will be given as follows:

1. Regular college work.
2. Special training for teachers of agriculture in conducting evening schools.
3. Textile Industrial Education.
4. Specialized instruction in conducting textile testing.
5. A short course combining these two features—industrial education and textiles—for persons who teach evening schools in textiles.
6. Training for foremen in industry.
7. Cotton grading June to July.
8. A conference is planned for executives, superintendents and foremen of the textile industry. It is planned to have outstanding leaders take part in this program.
9. Education for principals of rural schools, principals of mill schools and public school teachers.
10. Methods courses for primary and elementary teachers.

Provisions have been made for rooms and meals for both men and women who are interested in coming to Clemson for the training offered during the summer school.

A copy of the summer school catalog may be had on request addressed to The Registrar, Clemson College, S. C.

FARMERS' WEEK

Date to be announced.

PART VI.—GENERAL INFORMATION

HISTORICAL STATEMENT

Clemson College is the result of the scholarship, experience, and vision of Thomas G. Clemson. Without thought or inquiry one might conclude that the name represents merely the accident of the marriage of Thomas G. Clemson to Anna Maria, the gifted daughter of John C. Calhoun. But when one has taken the trouble to pry into the life of Clemson, he is likely to conclude that Clemson College marks simply the culmination of years of study, of thought, of experience and of high aim along the lines of science, particularly of science pertaining to agriculture.

Thomas G. Clemson was a Pennsylvania product. He was born in Philadelphia, July 1, 1807. His forbears settled in early colonial days in the rich Pequea valley and here they remained as tillers of the soil of Lancaster county. His father, however, was a merchant of Philadelphia. The name of Clemson is prominent in Pennsylvania today and appears upon the rolls of the army of every war in the nation's history.

Young Clemson, probably about 1826, having become interested in chemistry by study in a laboratory in Philadelphia, decided to go where he would have better opportunities, so he went to Paris.

He worked in chemical laboratories in Paris, attended lectures at the Sorbonne and, in 1828, through the influence of the American Consul, was admitted to the Royal School of Mines of France. In 1831 he received a diploma as Assayer and seems to have been employed in some capacity in Paris as assayer and chemist for most of the years 1832 to 1836.

The latter year found him again a resident of the United States, dividing his time between Philadelphia and Washington, engaged in practicing the profession of consulting mining engineer. His services seem to have been much in demand, for although he either inherited little from his father, or was unlaw-

fully deprived of his inheritance, by 1838 he seems to have acquired a modest competence.

He was of sufficient importance socially to mingle in the highest circles of Washington and to marry John C. Calhoun's daughter. They were married at Fort Hill in November, 1838.

At the same time Mr. Clemson seems to have formed an attachment for his distinguished father-in-law, which remained with him during his long life. The Calhoun and Clemson correspondence contains a large number of letters, which passed regularly between these two men until the former's death in 1850. These letters cover a great range of subjects in which, when it comes to scientific matters, Mr. Clemson was the chief contributor.

For much of the time between 1838 and 1843 the Clemsons lived at Fort Hill. Clemson's letters of this time to Calhoun contain frequent reference to such matters as Calhoun's mining interest at Dahlonega, Georgia, to which Clemson was devoting some attention, and to the activities on the Fort Hill plantation such as the introduction of the English Red Devon cattle, which Calhoun with Clemson's aid introduced into South Carolina at Fort Hill. Calhoun was a practical farmer. Clemson learned from him. Clemson was a scientist with a practical turn. Calhoun learned from Clemson.

In 1843, Clemson, having decided to become a Southern planter, purchased Canebrake plantation in Edgefield district and stocked it with slaves. Many letters between these two men refer to the management of this plantation and to the agricultural economy of the South.

From the vantage point of industrial Belgium, Clemson wrote to Calhoun, May 29, 1846, that he had received a letter from Mr. Pickens, who, as an act of friendship, was giving some attention to Canebrake plantation. Says Mr. Clemson's letter: "He (Mr. Pickens) further states that the negro cloth was all woven on the place." And Clemson adds, "My desire is that everything should be done on the place that could be done, even to making leather and shoes. If we were to suffice our wants on

a plantation, the Southern country would be vastly more prosperous and the character of the people elevated, unless we turn our attention to the arts (no matter how coarse) we shall always be a prey to the superiority of the North and the rest of the world." Clemson as early as this displayed a keen understanding of Southern problems.

The Clemsons went to live in Belgium in 1844, where, until 1851, he served as charge d'affaires of the American Legation.

In Belgium, Mr. Clemson had a rare opportunity of studying European farm problems and developments. It was during the period of his residence in Europe that Liebig and Johnston, famous chemists, were laying the foundation of modern scientific agriculture. He was an interested and appreciative observer.

When the Clemsons, having sold Canebrake plantation and their slaves, returned to the United States in 1851, they went to a Maryland farm. This was a place they called "The Home", near Bladensburg, Maryland, then about four miles from Washington. Here Mr. Clemson lived until the outbreak of the Confederate war. His time seems to have been divided between the practice of his profession of mining engineer and chemist and practical farming or to a study and administration of the sciences pertaining to agricultural practice.

For this period we have fullest record of his scientific and administrative activities and observe him at his best. He is best seen through the columns of *The American Farmer*, a Baltimore agricultural journal, to which he was rather a constant contributor for several years at the solicitation of the editor, through his contributions to the *Journal of the United States Agricultural Society*, and through the reports of the Commissioner of Patents.

In *The American Farmer* of July, 1856, we see him as a promoter of agricultural education. The states were beginning to establish the agricultural colleges, the forerunners of the Land Grant Colleges. Clemson was asked by Robert Bowie, President of the Maryland Agricultural Society, to aid.

In an open letter to Mr. Bowie Mr. Clemson says, in part:

“You do me the honor to say that an expression of my approval would materially aid you in canvassing the State in behalf of the proposed institution.

“The only hope we have for the advancement of agriculture is through the sciences, and yet there is not one single institution on this continent where a proper scientific education can be obtained. Those who wish to cultivate the sciences are compelled to resort to the institutions maintained by the monarchical governments of Europe.

“(By) such a project poor lands will be invigorated, the recuperative energies of exhaustive soils restored and wealth and prosperity will prevail where desolation, want and wretchedness now obtain.”

A few months later asked to speak at a banquet at which the Maryland Agricultural College was being promoted, he, declining because of a business engagement in New York, addressed the President of the Agricultural Society, Mr. James T. Earle, in part as follows:

“The subject is one of momentous interest, one of light or darkness, poverty or wealth, and comparative degradation or elevation. The only possible hope for the advancement of the arts is through science. The latter is the foundation upon which the former are built. Those who depend upon routine, must ever be behind, and advancement by that route is almost impossible. Science is correct practice, authentic, unerring history of all that has been discovered and invented since the creation of man.

“Bounteous heaven has given man the raw materials of which this world is composed. It is science that teaches how they may be transformed and made subservient to our wants. Those who look upon this wonderful creation as a heterogeneous haphazard mixture of innumerable materials, are wrong. The science of the world is advancing, has advanced, and will continue to advance as long as civilization continues, and it is questionable if the world has advanced in any other way than through science, at once the cause and effect of civilization.”

Says H. B. Learned in *The President's Cabinet*: “In government circles there was throughout the decade (1840-1850) a decided inclination in favor of establishing a Bureau of Agriculture—which would have placed (the agricultural activities) under an official directly responsible to the Secretary of the Interior.”

One such effort says Learned was “a project of Buchanan’s Secretary of the Interior (Jacob Thompson of Mississippi) in 1859 to place Thomas G. Clemson in direct charge of a Bureau.” His title was Superintendent of Agricultural Affairs, a place he held from 1859 to March 4, 1861.

The first Morrill bill providing for the establishment of the Land Grant Colleges was passed February, 1859, but was vetoed by President Buchanan.

Mr. Clemson addressed a letter to *The American Farmer* of date February, 1859, on “The Necessity and Value of Scientific Instruction.” A few quotations from this letter reveal his interest and enthusiasm on a subject in which he seems to have been successful in arousing much enthusiasm in others. Says this letter:

“The Advisory Board of Agriculture met last month and held its sittings in the Patent Office at Washington. It was called by the Secretary of the Interior and was composed of gentlemen connected with agriculture”

“So far as I could judge, there was unanimity in favor of Scientific Education . . . Some thought that an independent agricultural bureau, having at its head a Secretary, equal in rank, etc., with other Departments was essential . . . All, as far as I could learn, were in favor of donations of lands, from the public domain to the States, on certain conditions, for the establishment of Agricultural Colleges”

“I have long been of the opinion that the time would surely come, when in this country, more than in any other, the demand for scientific instruction, and that in its highest grade, would be imperative.”

“So far as I can understand, there is no higher, no better manner of forming or methodizing the mind, than through the sciences. They open a vista for reflection, which is unbounded; and from the separate works of the Almighty, the inquirer after truth is led, step by step, with increasing admiration, nearer and nearer to the immaculate archetype of creation.”

“Science would appear to be the most elevating of occupations for the mind. If we are not permitted to comprehend the Almighty, his works and the laws that govern the universe, are at least partially within our comprehension, and the contemplation must exalt the understanding and purify the mind.”

In the capacity of Superintendent of Agricultural Affairs, he set forth his opinions and recommendations in "Preliminary Remarks" in the Patent Office Report, Agriculture for 1860. Says this report:

"The requirements of the present age, and the permanent importance of the subjects embraced in its operations, demand that the powers of this agency of the government should be enlarged. This opinion was expressed in the views I had the honor to submit to the Secretary of the Interior at the period of my being called by that functionary to the position of Superintendent of Agricultural Affairs.

"A vast majority of the intelligent agriculturists of the country, dissatisfied with the limited functions now exercised by the government, not only confidently anticipate, but demand an organization at least equal in importance to that of any other department."

It is not too much to assume, therefore, that Clemson's part, through organizing sentiment and by enthusiastic support, was quite influential in bringing about the passage by Congress of the Morrill Act of 1862 and the Organic Act of May 15, 1862, by which respectively the Land Grant Colleges and the Department of Agriculture were made possible.

In an article on "Fertilizers" published in the Patent Office Reports of 1850 and 1860, Clemson shows a thorough grasp of chemistry, "both as a science, and in its application . . . to agriculture and to industry."

Mr. Clemson resigned his post on March 4, 1861, since his sympathies were with the South. He was beyond military age and might have remained a neutral. But both he and his young son, John Calhoun Clemson, early in 1861, went into the Confederate service. The son rose to a captaincy. Mr. Clemson served until the end of the war being then Supervisor of Mines and Mineral Works.

Mrs. Clemson toward the end of the war, had left her Maryland home to go to live with her mother at Pendleton, South Carolina. Here Mr. Clemson joined her in 1865 and here, or at Fort Hill, he lived for the remainder of his life.

These were the fearful days of Reconstruction. But Mr.

Clemson was scarcely established at Pendleton before he began to turn his attention to the matter of his chief interest—scientific education.

Mr. A. P. Calhoun, to whom Mrs. John C. Calhoun had sold Fort Hill with all the slaves, having died during the war with the bond and mortgage he had given to his mother unpaid, Mrs. Calhoun brought suit of foreclosure against the estate. Mrs. Calhoun died in July, 1866, in the midst of the suit, she having willed the Fort Hill estate,—one-fourth interest to her granddaughter, Floride Clemson Lee, and three-fourths to her daughter, Mrs. Thomas G. Clemson.

The Fort Hill estate sold at public auction for \$15,000 and was bought in by Mr. Thomas G. Clemson acting for his wife and his daughter, Mr. Clemson paying out of his own funds the large costs of the long litigation amounting to something like \$7,000.

Through Mr. Clemson's influence a committee from the Pendleton Farmers' Society was appointed November, 1866, to appeal for—

“Aid to found an institution for educating our people in the Sciences, to the end that our Agriculture may be improved, our worn and impoverished soils be recuperated and the great natural resources of the South be developed.” This committee consisted of Thomas G. Clemson, R. F. Simpson and W. A. Hayne. Other appeals were made in which Mr. Clemson was the mover. In 1869, the minutes of the Society tell of an instructive address on his favorite subject by the President, Mr. Thomas G. Clemson.

In 1871, the last of the Clemson's three children was tragically killed. This was Capt. John Calhoun Clemson. His sister, Mrs. Floride Clemson Lee, had died unexpectedly seventeen days earlier.

Soon after this Mr. and Mrs. Clemson determined to use part or all of the Fort Hill estate, which had now come into the former's possession, for the establishment of an agricultural college.

On August 9, 1874, a committee, selected by Mrs. Clemson, addressed a circular to the people of the State for support for founding a college at Fort Hill. Mrs. Clemson offered land, the circular stated, and "assurances of aid from other sources both able and disposed to give liberal assistance" were assured. A letter from Mr. Clemson to W. W. Corcoran of Washington reveals that this aid was promised from Mr. George Peabody of New York. The people could not or would not respond.

Mrs. Clemson died suddenly in 1875 leaving her share of the Fort Hill estate to Mr. Clemson, who was pledged to carry out Mrs. Clemson's desires.

On October 29, 1878, he addressed a letter to W. W. Corcoran of Washington asking for aid in founding this institution.

Asked for advice, Colonel R. W. Simpson, a member of the General Assembly, addressed a letter dated January 11, 1882, to Mr. Clemson advising him "to execute a deed to the property to the State to take effect at your death, provided the State will agree to erect and maintain an agricultural college".

This will was written shortly after that time by Colonel Rion but was rewritten in 1886 by Colonel Simpson. Mr. Clemson died at Fort Hill April 6, 1888.

Says the will in part:

"Feeling a great sympathy for the farmers of this State, and the difficulties with which they have to contend in their efforts to establish the business of agriculture upon a proper basis, and believing that there can be no permanent improvement in agriculture without a knowledge of those sciences which pertain particularly thereto, I have determined to devote the bulk of my property to the establishment of an Agricultural College upon the Fort Hill Place. My purpose is to establish an Agricultural College which will afford useful information to the farmers and mechanics; therefore it should afford thorough instruction in agriculture and the natural sciences connected therewith; it should combine, if practicable, physical with intellectual education, and should be a high seminary of learning in which the graduate of the common schools can commence, pursue and finish a course of studies terminating in thorough theoretic and practical instruction in those sciences and arts

which bear directly upon agriculture. * * * * but to always bear in mind that the benefits herein sought to be bestowed are intended to benefit agriculture and mechanical industries. * * * * I trust I do not exaggerate the importance of such an institution for developing the material resources of the State, by affording its youth the advantages of scientific culture.

“The desire to establish such a school or college as I have provided for in my said last will and testament, has existed with me for many years past, and many years ago I determined to devote the bulk of my property to the establishment of an Agricultural School or College. To accomplish this purpose is now the one great desire of my life.”

This will gave all that part of the Fort Hill estate inherited by Mrs. Clemson from her mother and the bulk of Mr. Clemson's other real and personal property. The latter amounted to a sum, which, considering the purchasing power at the time, probably has been only a few times exceeded in a public benefaction in South Carolina.

It provided for a Board of Trustees of seven members, to-wit: R. W. Simpson, D. K. Norris, M. L. Donaldson, R. E. Bowen, B. R. Tillman, J. E. Wannamaker, and J. E. Bradley, who with those chosen by the General Assembly should constitute a governing board in case the State accepted the bequest; but, who, in case the State declined the bequest, should alone constitute a governing board for a private institution.

These seven trustees, along with other friends of the movement, and the agricultural groups in the State developed and organized a public opinion favorable to the plan.

In November, 1889, the General Assembly of South Carolina accepted the terms of the will, and, following the decision of the United States Supreme Court to uphold the will, the State of South Carolina and the full Board of Trustees proceeded to convert the dream of Thomas G. Clemson into the reality of Clemson College.

The College was formally opened in July, 1893, with an enrollment of 446 students. The first graduating exercises were held in December, 1896, with a graduating class numbering

thirty-seven—fifteen in the agricultural courses and twenty-one in the engineering courses.

ENROLLMENT

	1926-27	Total
Enrollment—Regular Sessions -----	1,037	10,514
Graduates by Courses		
Agriculture -----	58	11,161
Mech. Elec. Engineering -----	—	514
Electrical Engineering -----	29	171
Mechanical Engineering -----	11	99
Civil Engineering -----	24	283
Architecture -----	7	49
Arts and Science -----	15	15
Chemistry -----	1	67
Textile Engineering -----	8	237
Textile Industrial Education -----	6	45
Total Graduates -----	158	2,646

GROUNDS AND BUILDINGS

Location.—The College is located on the Fort Hill homestead of John C. Calhoun, on the dividing line between Oconee and Pickens counties, in the picturesque foothills of the Blue Ridge. It has an elevation of 800 feet above sea level, and commands an excellent view of the mountains to the north and west, some of which attain an altitude of nearly five thousand feet. The climate is invigorating and healthful, and the surroundings are in every way favorable to the highest physical and mental development.

Clemson is easily accessible by highway being located on one that is paved. State highways number 2 and number 15 pass through Clemson and a bus service is maintained which operates daily at regular intervals on each.

The College is one mile from Calhoun, a station on the main line of the Southern Railway, and two miles from Cherrys,

on the Blue Ridge Railroad. By means of these roads and their connections, the College is easily accessible from all parts of the State. It is connected by telegraph and long distance telephone with all parts of the country. The post office is conveniently situated on the campus, and receives eight daily mails.

Grounds.—The college grounds comprise about 1,544 acres, including the campus, the farm, and the Experiment Station grounds. The campus, including about 200 acres, is laid out in walks, drives, and lawns, and is shaded by a beautiful grove of native forest trees.

Bowman Field, lying just in front of the Academic, Textile, and Y. M. C. A. buildings, provides for part of the military drill.

Riggs Field, a ten-acre athletic field, large and well-arranged, is located to the west of the Y. M. C. A. Building, and provides for baseball, football, track, tennis and military drill.

ADMINISTRATION BUILDING

The administration building is a three-story brick structure, 100 by 132 feet, trimmed with gray sandstone. It contains 36 rooms including recitation rooms, literary society halls, and the offices of the President, the Registrar, the Commandant, the Treasurer, the Business Manager, and the Alumni Secretary. The public Telegraph Office is on the ground floor of this building. Adjoining this building is Memorial Hall, the College Chapel, which has a seating capacity of about eighteen hundred. It is used for religious services and as an assembly room. In the basement are the class rooms and laboratories of the physics division.

LIBRARY

The college library is one of the most beautiful buildings on the campus being of colonial style and constructed of red brick with columns and trimmings of stone. In this building is housed the general and reference library, as well as the experiment station library. There are more than thirty thousand five hundred volumes and approximately ten thousand public documents and government publications.

A very commodious reading room is provided and a well selected list of periodicals is made readily accessible to the students.

In the balcony of the reading room are found the oil paintings collected by Mr. Clemson as well as a large collection of portraits.

ENGINEERING BUILDING

The building is of reinforced concrete and tile construction, thoroughly fireproof. Exterior walls are of tapestry brick, and the roof of blended red tile. Entrances and trim are of limestone. In general design the building is the Italian Renaissance style. It has a long central sweep, broken by the main entrance of rusticated limestone surmounted by a balustrade and a broken pediment motif. There are two end pavilions each having a large limestone window with wrought iron balustrades and arched windows above.

The entire basement floor is given over to mechanical and civil engineering laboratories. Provisions are made for a large testing laboratory and a mechanical laboratory of the same size. Smaller laboratories are also provided.

Mechanical and electrical engineering occupy the first floor. Two class rooms, a large laboratory, and an office are included in one half of the floor for the electrical division. Four class rooms and office space for the mechanical engineering division, a department library, and director's offices, comprise the other half.

Engineering drawing rooms and civil engineering class rooms occupy most of the second floor. One wing is devoted to electrical class rooms and laboratories.

The entire third floor, with the exception of one room, is devoted to architecture. Four large drafting rooms, a studio, two class rooms, an architectural library and offices, are included in the plan for the floor. There is also on the third floor a large assembly room which accommodates all electrical and mechanical students.

TEXTILE BUILDING

This building is a brick structure of modern cotton mill design, 168 by 75 feet. It is of the slow-burning type, built according to fire insurance regulations, after plans of an experienced mill engineer. The building, although designed for educational and experimental purposes, containing office, lecture rooms and laboratories, retains the more prominent features of a typical Southern cotton mill. This affords the student an opportunity of gaining many points of valuable information in connection with mill construction, along with the manipulation of cotton fibres and the study of cotton mill processes and operations.

CHEMISTRY BUILDINGS

Two brick buildings, each about 80 by 50 feet with two stories and a basement, connected on both floors by glass enclosed passages, are devoted to the work of this department.

See

The south building is used almost entirely for class work.

The north building serves partly for class work and partly for the analytical work of the Fertilizer Analysis Division, and contains the Chemistry Department Library.

These class rooms and laboratories are well equipped for carrying on the work as offered in the different courses.

FERTILIZER BUILDING

This is a three-story brick building, situated near the south chemistry building, and containing the offices of the Secretary of the Board of Fertilizer Control, fertilizer tag rooms, etc.

The Clemson College Post Office occupies the ground floor of this building.

VETERINARY HOSPITAL

The veterinary hospital is a two-story frame building 48 by 65 feet, with basement 18 by 30 feet. The basement contains a store room. The class room, office, pharmacy, and a well-equipped clinic and operating room are on the first floor. A

laboratory for class work, a private laboratory and a store room for supplies are on the second floor.

DAIRY BUILDING

The dairy building is constructed of red brick trimmed with limestone. In addition to class rooms and laboratories it contains the offices of the following divisions: animal husbandry, dairy, horticulture, and education. It is equipped with modern machinery for the manufacture of butter, ice cream and other dairy products, and for teaching modern methods of dairying.

LIVE STOCK BARNS

The dairy barn will accomodate both the experiment station and college herds. It has separate box stalls for bulls and young stock. These floors are of cement, and cork brick is used on the floors where the cattle lie. The lighting, ventilation, sanitation, stanchions, stalls and the equipment for cleaning and feeding are of the most modern type to be found in the country. There are also four large cement silos conveniently located, where the stock feed is kept to supply these barns.

Nearby is a calf barn and a hog barn embodying the most recent improvements in such buildings.

POULTRY PLANT

This is one of the most recent additions to the college teaching facilities. A full time superintendent is employed. His residence is near the other buildings.

The plant consists of several laying houses as well as a large number of colony houses. Besides the buildings and pens there is sufficient equipment for conducting both research and collegiate instruction in poultry husbandry. A large number of fowls is kept at the plant.

The plant was given by a friend of the institution who is interested in promoting the agricultural welfare and readjustment in the State.

Y. M. C. A. BUILDING

This building is in the Italian Renaissance style of architecture, of texture brick with colored tile inserts, terra cotta trimmings, and red tile roof. The interior finish is of stained yellow pine. It contains four floors—basement, mezzanine, first floor, and dormitory floor, giving a total of thirty-six thousand square feet of floor space.

The basement contains a basketball room, kitchen, quick lunch room, two bowling alleys, swimming pool, shower and locker rooms, and general toilet.

The mezzanine floor is given over principally to committee rooms, retiring rooms, and balconies.

On the first floor are the general offices, reading, games, and lounging rooms, a ladies' club room, and an auditorium. The dormitory floor has living rooms, a Masonic lodge room, and motion picture machine facilities.

The building is furnished and equipped to make a large contribution to the religious, social, and physical life of the student body and the community.

RESIDENCES

A number of brick and frame residences, situated on the campus, furnish homes for most of the college teachers and officers.

BARRACKS

The cadet barracks comprise three large brick buildings. One is four stories high and contains 247 rooms for students. The second building is 199 by 42 feet, and contains 104 rooms. The third building is 45 by 190 feet and contains 111 rooms.

These buildings are heated by steam and lighted by electricity, and have an abundant supply of hot and cold water. The rooms in the barracks are furnished with single-width iron cots and other necessary appointments.

CALHOUN MANSION

In accordance with the provisions of Mr. Clemson's will, the former residence of John C. Calhoun is kept in honor of his memory.

Several pieces of furniture and other interesting relics, formerly the property of Mr. Calhoun, are carefully preserved in the Calhoun Mansion, where they may be seen by visitors to the College.

CLEMSON COLLEGE HOTEL

The hotel, a frame building with one eight-room annex, situated on a hill overlooking the campus, is operated by the College. This furnishes a home for many officers and teachers.

HOSPITAL

The hospital, located about a quarter of a mile from the barracks, is a wooden building, especially designed for the purpose. It is in the immediate charge of the Surgeon, who is assisted by two experienced nurses thus insuring the best personal attention to each patient. The hospital is equipped with Victor X-ray machine, and the latest design souresine machine for ear, eye, nose and throat treatment. There are also other necessary surgical instruments for minor operations and a well equipped laboratory.

LAUNDRY

This is a brick building especially constructed and fitted with the improved machinery of a modern steam laundry, and is operated exclusively for the students.

FARM BUILDINGS

The college farm is provided with commodious barns and other farm buildings of modern design, which are described more fully in connection with the equipment for instruction in agronomy.

HORTICULTURAL GROUNDS

The ornamental horticultural grounds are situated southeast of the campus. Their acreage is devoted to the growing of various trees, shrubs, and flowers, and affords a beautiful park area as well as a small ornamental nursery. The experimental horticultural grounds are located east of the campus and comprise about twenty acres. This area is devoted to experiments with apples, peaches, grapes, pecans, and small fruits. Vegetable and truck crop experiments are conducted in a fertile bottom along the banks of the Seneca River, about one mile southwest of the campus.

Greenhouses.—Three modern greenhouses provide excellent facilities for horticultural work.

The General Water Supply is taken from Hunnicutt Creek about three-quarters of a mile above the pump station. The water flows by gravity to a settling basin 36 feet by 36 feet, and from there through two gravity filters having a capacity of three hundred and fifty gallons per minute. The filtered water passes to a storage reservoir from which it is pumped into a stand pipe one hundred feet high having a capacity of 130,000 gallons. From this it is distributed from the main to the various college buildings and to all parts of the campus. This water is tested regularly to see that it is kept free from all contaminations.

PART VII.—PUBLIC SERVICE

*THE SOUTH CAROLINA AGRICULTURAL EXPERIMENT STATION**

The Agricultural Experiment Station of South Carolina is a department of Clemson College. The experiment station at present consists of the main station, which is located at Clemson, and three sub-stations; one at Summerville, in the coastal plain region, one at Florence, in the Pee Dee section, and one at Pontiac, near Columbia, in the sand hill region. The main offices and laboratories of the station are located on the Clemson College campus, while the station experiment farm, consisting of about 200 acres, is east of and adjoining the college campus. The investigations dealing with the fundamental principles of agricultural sciences and with the application of such principles to practical agricultural operations are carried on in the laboratories and on the experiment station farm at Clemson. The experiments looking to the adaptation of such scientific data accumulated here and elsewhere to the conditions peculiar to certain sections of the State are carried on at the sub-stations and at branch laboratories established in certain sections of the State for this purpose.

It is the aim of the experiment station to conduct research work on problems which have a direct practical bearing on the agriculture of the State. With this end in view elaborate experiments relative to the best methods of procedure under various conditions with the principal plants and animals have been undertaken. As progress is made with such experiments the results obtained are given out to farmers in the form of bulletins, circulars and personal letters. Since the establishment of the station 240 such bulletins and 89 circulars have been published, covering practically all phases of agriculture.

Aside from the research work and the publication of results obtained from such research the experiment station performs various other duties. Among these might be mentioned the entomological and pathological inspection work which aims to pro-

*The Experiment Station staff is given on page 22.

tect the farms, orchards and gardens of the State against the introduction of injurious insects and diseases; the biological and soil survey of the State; and the cooperative experimental work carried on with hundreds of farms in the State. The technically trained experts of the station staff are regarded as authorities in their several specialties and they are constantly giving out information relating to the various lines of agricultural endeavor. More than fourteen thousand personal and circular letters are written annually to residents of the State giving technical information to individuals on special subjects. The station staff also aids in disseminating agricultural knowledge by co-operating with the Extension Service of the College in holding agricultural meetings and conferences and by meeting with the farm demonstration agents and giving to them technical information which they in turn carry direct to the farmers.

Close cooperation is maintained with the various research bureaus of the National Department of Agriculture and with the departments of the College. The laboratories are always open to the inspection of the students and other people of the State. The same is true of the experiment station farm. There is always opportunity for a limited number of students to secure work in the various divisions of the station and to assist in the research work carried on by the members of the station staff.

A full report of the work and expenditures of the Experiment Station is published annually and this report and all other publications of the station are free and will be sent on request. Requests for these should be addressed to H. W. Barre, Director, Clemson College, S. C.

*THE AGRICULTURAL EXTENSION SERVICE**

The agricultural extension work of the College is carried on by the Extension Service in co-operation with the United States Department of Agriculture. The work is supported by Federal appropriations and in part by State and County appropriations. The main development of extension work has come since the enactment of the Smith-Lever Act in 1914. The purpose of Extension work is to instruct farmers of the State in the practical ap-

*The Extension staff is given on page 23.

plication of the principles of improved agriculture in both production and marketing. A staff of specialists, some of whom are also members of the Agricultural Faculty, assist the county agents in planning and carrying out demonstrations with farmers over the State.

Publications.—A large number of publications, including bulletins, circulars, posters, and information cards are distributed annually. *The Weekly News Notes* is published to carry matters of timely and practical interest to the editors and a few farmers of the State. A free press plate service is also furnished to those papers requesting it. In addition to this, news letters are issued on an average of three times per week and these are sent only to the newspapers. Monthly letters or printed circulars on poultry, orchards, gardening, dairying and boys' club work are mailed free to those persons especially interested in these subjects.

County Agents.—Every county in the State, by co-operation in providing the finances, may have a county agent. These agents are agricultural college graduates who have had practical farm experience. They devote their time to instructing farmers through demonstrations, personal conferences, meetings, community organizations, publications and letters.

Home Economics Work.—This work is carried on under the immediate supervision of Winthrop College. It is, however, a part of the Extension work under the Smith-Lever Act, and as such is under the general direction of the Extension Service. Nearly every county is provided with one home demonstration agent in the same way that they are provided with county agents.

Negro Demonstration.—A few negro local agents are employed to work with the negro farmers of the State in sections where the negro population is great. These agents are employed in co-operation with the State College at Orangeburg, and the President of the State College acts as District Supervising Agent.

Live Stock.—Work in this project is carried on with the idea of promoting the live stock interest of the State along sound

permanent lines. Those desiring to purchase purebred live stock can in most cases secure them within the State from breeders who have been assisted by the Extension Service. This was not true ten years ago. Live stock agents have also stimulated the growing of pastures and forage crops and have assisted in the feeding and marketing of cattle and the co-operative purchase of materials needed. There is a revival of interest in hogs and sheep and with low cotton prices these lines of live stock work will no doubt make greater demand for assistance on the Extension Service.

Dairying.—The Extension dairymen devote their time chiefly to development work such as bull associations, feed campaigns, dairy schools, advice regarding the construction of silos, barns, purchase of dairy cattle and the testing and improvement of herds.

Corn and Cotton Breeding.—Variety tests of corn and cotton are conducted in a dozen localities in the State along with demonstrations in the field selection of corn and cotton. Up to date this work has resulted in showing what varieties of corn and cotton are best adapted to different sections of the State, and farmers are generally planting those varieties. A number of communities are being given assistance in organizing for growing only one variety of cotton and one of corn. A cotton contest among farmers is conducted annually for the purpose of improving the quality of staple and lowering the costs through larger yields per acre.

Orchards, Gardens and Potato Storage Houses.—Home orchards and gardens, commercial peach and apple orchards are the principal lines of work developed by the Extension horticulturists. The results obtained in the last few years along these lines are far reaching, and point the way for the proper utilization of some of our acres under present conditions.

Poultry Work.—The wisdom of increasing the size and quality of farm flocks is now being emphasized, together with efficiency in marketing poultry products. In 1926, 104 carloads of live poultry were shipped out. Many hatcheries are in opera-

tion and every phase of poultry production is being enlarged. A modern poultry plant at Clemson was given to the College by a friend interested in promoting agricultural welfare and readjustment. This is one of the best poultry plants in the cotton states and serves as a place to work out poultry problems, as well as a demonstration to farmers and for teaching purposes.

Marketing.—Efforts are made to secure convenient and profitable marketing arrangements for the various crops of the State. The organization of co-operative marketing associations is encouraged. Proper grading and loading for shipment are stressed, particularly where farmers are just beginning to produce a new crop. Shipping point inspection has been provided for those who want it in cooperation with the Federal Bureau of Agricultural Economics for the protection of shippers of certain perishable crops. There is produced very little of surplus crops for which some outlet has not been found.

Entomology.—There are two principal lines of this work: first, insect control work, and second, beekeeping work. One specialist is employed who gives his time to the insect work, instructing farmers as to the life history, habits, etc., of insects and control measures.

A specialist in bee keeping is employed to develop this industry. This State has great possibilities along this line.

Boys' Club Work and Short Course.—Boys' agricultural clubs are organized with the idea of enlisting the intelligent interest of the boys, and through them their parents, in improved methods of agriculture. To the winners of certain contests short courses are provided at the College during the summer months.

Organizations.—Whenever conditions are suitable for community organizations, these are encouraged and the full support of the Extension Service is lent towards making them successful.

LIVESTOCK SANITARY WORK*

The Clemson College Live Stock Sanitary Office is a department of Clemson College and is under the supervision of the

*The Livestock Sanitary Work staff is given on page 25.

Agricultural Committee of the Board of Trustees. This office is located in Columbia, S. C., in order that the best interests of the livestock industry may be served, and is in charge of the State Veterinarian, Dr. W. K. Lewis, who is also Director of this Department.

The principal functions of this office are: Tick Eradication, Tuberculosis Eradication and Hog Cholera Control. In addition to these, all reported outbreaks of contagious, infectious and communicable diseases of livestock are investigated, and measures recommended for the control and eradication of the specific condition; and quarantine is maintained against the introduction of diseased livestock into the State.

The Columbia office has recently established a fully equipped laboratory for bacteriological and pathological work, in order that proper and prompt diagnosis of certain diseases may be made. Parasitic research work will be conducted in various sections of the State in connection with the Columbia laboratory.

In addition to the force of veterinarians working out from the Columbia office, Assistant State Veterinarians are located at strategical points in the State so as to be readily available to the farmers in their respective territories.

On July 1, 1925, twenty-two (22) practicing veterinarians of the State were commissioned as Deputy State Veterinarians, to assist the State Veterinarian in the control and eradication of contagious and infectious diseases of livestock. The Deputy State Veterinarians are located principally in the northern and eastern sections of the State, and with the Assistant State Veterinarians located in the middle and southern sections of the State, the Clemson College Live Stock Sanitary Office is in position to render a service to the livestock industry of the State in keeping with its development and maintain the service to the highest degree of efficiency.

The Clemson College Live Stock Sanitary Office also maintains an equipment for handling large stocks of anti-hog cholera serum, virus and veterinary biologics and furnishes these

products to the citizens of the State at cost, thereby effecting a saving to them of several thousands of dollars annually.

The live stock sanitary work is required by legislative enactment and is supported by legislative appropriations.

The Bureau of Animal Industry, U. S. Department of Agriculture, co-operates in Tick Eradication, Tuberculosis Eradication, and Hog Cholera Control, and duplicates the amounts appropriated by the State Legislature for these projects.

Fertilizer Inspection and Analysis.—The work of fertilizer inspection and analysis is under the supervision of the Board of Control consisting of ex-Governor Richard I. Manning, chairman, J. E. Wannamaker of St. Matthews, and J. J. Evans, Bennettsville. The work of inspection is under the immediate supervision of D. H. Henry, Secretary of the Board of Control.

There are inspectors to look after this feature of the work in different parts of the State.

The work of analysis is carried on in the Fertilizer Analysis Division of the Chemical Department and is under the supervision and direction of Dr. R. N. Brackett, Chief Chemist.

The work consists of the analysis of commercial fertilizers as provided for by the Fertilizer Law of the State. This Division also undertakes the analysis of waters, ores, minerals, and other naturally occurring materials, except soils (which are analyzed by the Experiment Station), portions of human bodies in cases of suspected poisoning, as provided for by law, and the analysis of home-mixed fertilizers. All the work of this Division is done free of charge.

MISCELLANEOUS PUBLIC SERVICE

Entomological and Pathological Inspection.—This work is carried on under the direction of the State Crop Pest Commission.

The State Entomologist is Prof. F. Sherman, head of the division of Entomology, and the State Pathologist is H. W. Barre, head of the division of Botany and Bacteriology.

The work of these officers consists of the control of contagious plant diseases and insect pests. The State Entomologist has also supervision of all nursery stock sold within the State.

A permit tag issued by the State Crop Pest Commission should be attached to every package of nursery stock, seed or plants offered for sale or shipment for planting purposes.

State Vocational Agricultural Judging Contest.—Clemson in cooperation with the State Department of Education conducts annually a contest for students of vocational agriculture. The nature of this contest is educational and many high school boys have an opportunity thereby of improving themselves in selecting better specimens of various agricultural products. The three schools ranking highest in the contest in 1926 were Pickens, Lexington, and Lydia.

Textile Testing.—The textile department maintains a yarn testing service for the cotton mills of South Carolina.

Textile Research.—Clemson in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture conducts manufacturing tests of grades, staples and varieties of cotton. Valuable reports based on this work are issued from time to time. Copies of the same may be had by addressing either the College or the Bureau of Agricultural Economics.

PART VIII—STUDENT REGISTER

THE CORPS OF CADETS 1927-1928

UNITED STATES ARMY PERSONNEL

Lieutenant Colonel O. R. Cole	Infantry
Captain A. W. Penrose	Infantry
First Lieut. C. Q. Lifsey	Infantry
First Lieut. H. D. Johnston	Infantry
First Lieut. R. W. Johnson	Infantry
First Lieut. P. G. Balcar	Infantry
Staff Sergeant. A. D. Stern	Detached Enlisted Men's List
Sergeant G. E. Naramor	Detached Enlisted Men's List
Sergeant R. K. Fowler	Detached Enlisted Men's List

CADET REGIMENTAL ORGANIZATION

Colonel W. C. Dargan

Lieutenant Colonel W. W. Hudgens
Captain R. O. Pickens, Adjutant
Captain W. F. Maner, Chaplain
Captain G. F. Klugh, Intelligence Officer
Captain J. T. Mundy, Plans and Training Officer
Captain W. R. Odell, Supply Officer
Master Sergeant, G. E. Faulkenberry, Sergeant Major
Master Sergeant, J. C. Galloway, Supply Sergeant
Staff Sergeant, F. E. Pearman, Color Sergeant
Staff Sergeant, J. C. Galloway, Color Sergeant

BAND

Captain	G. S. Hutchins
First Lieutenant	J. H. Clark
First Lieutenant	W. P. Timmerman
Second Lieutenant	R. E. Farmer
Second Lieutenant	W. C. Hutchins
Drum Major	B. V. Cornwall
Sergeant	L. H. Graham
Sergeant	R. L. Sweeny
Sergeant	L. Anderson
Corporal	T. Baker
Corporal	V. A. Bouknight
Corporal	F. H. Hendrix
Corporal	R. G. Hodges
Corporal	J. O. Warren

DRUM AND BUGLE CORPS

First Lieutenant	J. J. Avent
Second Lieutenant	E. P. Hafers
Sergeant	D. L. Wingo
Corporal	J. B. Rodgers
Corporal	J. H. Allison

REGIMENTAL ORGANIZATION

FIRST BATTALION

Tactical Officer, 1st Lt. P. G. Balcar

Major J. A. Jones
 Adjutant First Lieutenant A. C. Link
 Sergeant Major Staff Sergeant C. A. Jackson

COMPANY A

COMPANY B

COMPANY C

COMPANY D

Captains

W. J. Brogdon

G. T. Bryce

G. H. Dunlap

M. B. Farrar

First Lieutenants

W. B. Abbott

J. L. Bell

M. D. Crook

B. R. Fowler

H. E. Stoppelbein

M. M. Campbell

B. H. Cuttino

J. C. Garrison

Second Lieutenants

B. L. Bickley

C. A. Bryan

E. B. Early

L. W. Hart

M. H. Jones

G. H. Carroll

C. D. Green

B. C. Harvey

First Sergeants

T. M. Clyburn

G. P. Cobb

H. W. Hoefer

R. Jeffers

Sergeants

R. C. Alexander

T. C. Anderson

T. P. Townsend

H. W. Cunningham

C. R. Barton

F. E. Clary

T. E. Dill

G. M. Davis

C. M. Burdette

J. H. Clippard

T. H. Copeland

F. C. Davis

J. W. Guy

J. H. Cochran

S. A. Harvin

T. H. McCarley

R. N. McClain

J. F. Hawkins

L. F. Sander

G. F. Powers

C. D. Wright

R. M. Hall

H. A. McGee

R. A. Taylor

Corporals

J. C. Attaway

L. A. Bodie

H. W. Asbill

E. S. Clyburn

J. B. Bevell

V. M. Barnes

R. T. Beason

J. M. Coleman

H. D. McCorley

V. Dukes

J. R. Chisholm

F. C. Ducker

A. T. McElveen

R. A. Jolly

W. B. Hough

J. L. Guy

E. W. Miller

H. A. Lathrop

J. M. Lawton

L. McIntosh

A. A. Plyler

R. W. Sanders

Q. E. Mathis

H. C. Tucker

J. E. Trowbridge

J. F. Scurry

A. D. Mouledous

T. R. Wannamaker

J. T. Hutchinson

M. D. Ware

F. S. Rush

W. W. Hane

SECOND BATTALION

Tactical Officer, 1st Lt. H. D. Johnston

Major D. S. Cuttino

Adjutant First Lieutenant, J. C. Marchbanks

Sergeant Major Staff Sergeant, J. L. Adams

COMPANY E

COMPANY F

COMPANY G

COMPANY H

Captains

R. H. Burgess

T. G. Hanner

T. W. Smith

R. T. Stutts

First Lieutenants

C. H. Glaze

T. L. Hughston

A. S. Jones

B. R. Richey

R. E. Hightower

H. Husbands

J. C. Hair

R. C. Harrington

Second Lieutenants

J. O. Hicks

L. B. White

M. A. Jones

L. C. Padgett

W. C. James

W. M. Seaborn

J. P. Mealing

C. H. Patrick

First Sergeants

T. J. Mitchell

J. F. Callaham

J. D. O'Quinn

M. B. Richardson

Sergeants

R. C. Carter

E. V. Johnson

F. J. Eison

W. H. Acker

J. N. Davis

C. J. King

H. R. McCauley

G. T. Andrews

C. S. Lewis

W. N. Kline

E. C. Murdock

H. S. Byrd

J. R. McComb

P. B. Leverett

O. K. Pressly

B. K. Thomson

F. H. Moore

C. R. Mahaffey

H. L. Shands

H. M. Tuten

J. B. Odell

C. R. Blakeny

E. H. Webb

H. Turner

Corporals

J. G. Ferguson

W. B. Galloway

J. A. Hudgens

D. C. Carter

C. E. Gregg

J. M. Hamilton

W. F. Hughes

L. C. Chamblee

H. B. Hair

F. H. Josey

D. W. Hunt

C. L. Grimsley

P. J. McClure

F. Y. Mercer

L. L. Lee

R. L. Hunter

J. D. Miller

W. E. Powell

R. V. Magill

H. C. Parham

E. H. Robertson

S. W. L. Thompson

E. H. Mazyck

T. L. Smyth

J. C. Willis

J. A. Wilson

L. W. Pitts

C. DuRant

F. R. Cochran

R. L. Hinson

M. W. Jones

E. Armstrong

THIRD BATTALION

Tactical Officer, 1st Lt. C. Q. Lifsey

Major C. E. Britt

Adjutant First Lieutenant A. P. Wylie

Sergeant Major Staff Sergeant J. B. McLeod

COMPANY I

COMPANY K

COMPANY L

COMPANY M

Captains

W. N. Martin

H. T. Williams

R. B. Midkiff

B. F. Wingard

First Lieutenants

C. W. Mercer

J. H. Robinson

H. K. Taylor

J. E. Whilden

L. W. Shelly

E. N. Geddings

J. N. Moore

W. H. Pressly

Second Lieutenants

H. L. Eskew

R. E. McConnell

L. E. Berry

C. H. Lineburger

R. B. White

W. B. Turner

T. F. McGlone

M. G. Smith

First Sergeants

W. J. Wray

D. B. Sherman

W. P. West

J. H. Mayer

Sergeants

J. M. Eaddy

J. T. Ellis

M. G. Chitty

S. H. Rogers

D. D. Evans

K. A. Smoak

M. R. Daniel

W. T. Rose

W. G. Holland

W. P. Tiencken

F. W. Lachicotte

M. B. Stevenson

M. L. Poore

A. B. Wilder

J. J. McLesky

H. G. Strange

R. G. Pridmore

J. H. Witherspoon

J. I. Rogers

R. C. Willimon

C. E. Ray

G. D. Robinnette

J. B. Valley

W. E. Osteen

Corporals

E. C. DuPre

S. B. Earle

J. J. Cohen

J. R. Atkinson

J. E. Lester

C. McMillan

B. K. Hiller

O. W. Bethea

E. P. McDaniel

F. K. Nimitz

J. G. Moxon

J. J. McFaddin

C. Q. Murray

S. R. Power

W. C. Nettles

J. W. Patterson

C. Ray

E. Riley

J. M. Prim

A. R. Ramseur

J. L. Salley

P. D. Schumacher

L. W. Reese

W. F. Sample

J. R. Welsh

R. P. Swofford

J. A. Williams

J. C. Sease

B. G. Wilson

G. H. Wise

C. M. Wells

J. W. Stockman

DEGREES CONFERRED JUNE 7, 1927

Agriculture—Agronomy

Fred Albert Beam -----	Pelzer	William Emmett Jones -----	Bethune
Henry Kearsse Brabham -----	Bamberg	Benjamin Franklin Lenhardt ---	Easley
William Fred Chapman -----	Belton	James Dexter Major -----	Belton
Monroe Crawford Crain -----	Taylor	James Hammond Rickborn -	Reevesville
Joel Arlee Whetsell -----		Parler	

Agriculture—Animal Husbandry

Albert Dargan Breland ---	Cottageville	Henry Emmett McCracken ---	Hopkins
Ernest Miles Caughman ---	Lexington	William Hanks Pruitt -----	Anderson
James Levis Herron -----	Starr	Edward Pegues Spencer-McFarland, N. C.	

Agriculture—Chemistry

John Henry Baker -----	Orangeburg	Richard Theodore Tyler ---	Orangeburg
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Agriculture—Dairy Husbandry

Daniel Hydrick Cash -----	Chesnee	George Washington Sharp -----	Leslie
Alexander Cheves Haskell, Jr. -----		Clifford Twining Smith -----	Kinards
-----	Augusta, Ga.	Joseph Walter Williamson -----	Hamer

Agriculture—Education

Rudolph Duffey Anderson -	Bennettsville	Oma Franklin Jones -----	Easley
George Washington Bonnette -	Monetta	Larry Brewington Massey ---	Pendleton
Lewis Ezra Cromer -----	Seneca	William Page -----	Galivants Ferry
Thomas Elbert Dorn, Jr. ---	Greenwood	Henry Latimore Rasor -----	Donalds
Robert Henry Garrison -	Sandy Springs	Fred William Shore -----	Greer
Homer Buford Goff -----	Leesville	Talmage Boyd Skinner -----	Woodruff
Cecil Pound Goodyear -----	Nichols	Samuel Thomas Smith -----	Conway
Heyward Simkins Grice -----	Ward	John Andrew Stephenson -----	Sharon
Fred Garland Hamrick -----	Gaffney	Harry Lee Stoutamire -----	Holly Hill
John H. James -----	Greer	James Hayes Talbert -----	McCormick

Agriculture—Entomology

Whiteford Lee Baker -----	Jefferson	Otis Rembert Causey --	Chadburn, N. C.
Lucius Brown Reed -----		Anderson	

Agriculture—Horticulture

Charlie Clifton Bennett -----	Fort Mill	Claude Eugene McLeod, Jr. --	Beaufort
Nevitt Crosby Cromer -----	Anderson	Percy Miley -----	Brunson
Frank Harrison Gerrard -----	Anderson	Charles Carter Newman, Jr.-----	
Edward Copeland Hayden -----	Cope	-----	Clemson College
Stanwix Greenville Hutto ----	Denmark	Charlie Leonadus Parnell --	Gillisonville
Williston Wightman Klugh, Jr.-----		Lewis Pou Watson -----	Ridge Spring
-----	Clemson College	Charles Cummings Weigle ----	Belton
James Emmett Youngblood -----		Elko	

Architecture

George Wilson Bryce -----	Florence	Harold E. Keenan -----	Graniteville
Cecil Rhodes Dobson -----	Lancaster	Sim William McDaniel -----	Beaufort
John Henry Donaldson ----	Georgetown	Paul Francis Meredith -----	Central
Marvin Lamar Parler, Jr. ----		Wedgfield	

Arts and Science

William Marshall Bennett -----	Ashton	Patrick Mark Nichols ----	Silver Street
William Carroll Brown, Jr. -----	Belton	Clifford Marion Reynolds _	Bennettsville
William Bryant Calhoun -----	Baldock	Clarence Milford Rogers -----	Pelzer
Marconi Lester Franklow ----	Leesville	Prue Ernest Swords -----	Central
William Perry Johnson -----	Inman	John Richard Thomas -----	Cope
Gustave Ernest Metz -----	Dunn, N. C.	Casper Perrin West -----	Greenville
James Alexander Milling ---	Greenwood	Alvin Henry White -----	Simpsonville

Chemistry

Frederick William Kinard ---- Leesville

Civil Engineering

James Walter Adams ----	Jamison, Ala.	James Noflet King, Jr. -----	Gaffney
Ludlow Calhoun Adams ----	Meriwether	Sherwood Edmond Liles, Jr. --	McColl
James Long Aull -----	Pomaria	Townes Robertson Little ----	Anderson
Paul Barnette Austin -----	Greenville	Charles Young Phillips -----	Norris
James Kirkham Avent ---	Bennettsville	James Edgar Rosamond ----	Greenville
William Jackson Berry, Jr. ----	Duncan	Dwight Harrington Ross ----	Florence
Frederick Ellridge Cullum --	Batesburg	Clynch Townsend Salley -----	Salter
Robert Hamelton Cureton ---	Greenville	Louis Augustus Seaborn ----	Walhalla
Julius Edwards Earle -----	Starr	Talley Elias Smith -----	Rowesville
Thomas Jefferson Hayden, Jr. --	Great Falls	Edgar Stewart Sutherland ----	Pickens
Theron Judson Hendrix -----	Duncan	Walter West, Jr. -----	Spartanburg
Robert Caldwell Jones -----	Bamberg	Carleton Nettles Whilden -----	Sumter

Electrical Engineering

Harold Lawrence Baldwin --	Orangeburg	Malcolm Henry Hendee, Jr. --	Augusta, Ga.
John Leland Brock -----	Central	Montague Hoskins Hicks ---	Hartsville
George Harold Brodie -----	Salley	James Donald Knight -----	Angelus
John Robert Royal Cooper ----	Belton	Samuel Austin Lee -----	Orangeburg
Robert Carl Dill -----	Greenville	James Raymond McTeer ---	Walterboro
Charles Buise Dowling, Jr. ----	Swansea	Richard Maynard Marshall ---	Beaufort
Olaf Roughton Duggan -----	Seneca	Roy Herman Mitchell ---	Augusta, Ga.
Thomas Jackson Etheredge, Jr. --	Batesburg	William David Nickles -----	Pelzer
Lamar DeWitt Gaston -----	Reidville	Oscar Stokes Robison -----	York
William Jeremiah Gooze -----	Fairfax	Robbie Oswald Sams -----	Jonesville
James Wightman Greene ----	Greenville	John Thomas Scott -----	Jonesville
John Harstean Hardee -----	Lowrys	James Ulla Wilson ----	Villa Rica, Ga.

Electrical and Mechanical Engineering

Francis Joseph Fishburne ---	Charleston	Ernest McClain Long -----	Rock Hill
Sidney Lockwood Gillespie --	Hartsville	Loudwin Rogers Miller --	Bennettsville

General Science

Hoyt Chapman ----- Calhoun

Mechanical Engineering

Harold Williams Askins --	Timmons ville	Gilbert Clark DuPre -----	Columbia
William Edwin Burnett -----	Wellford	Curtis Cornelius Faust -----	Denmark
James Patterson Cannon --	Honea Path	John Kershaw -----	Augusta, Ga.
James Albert Coan -----	Wellford	Edward McQueen Salley, Jr. --	Saluda, N. C.
Thomas Burnice Corbett ---	Walterboro	Joseph Albert Warren, Jr. -----	
Floyd Malcolm Cox -----	Belton	-----	Mt. Vernon, N. Y.

Textile Engineering

Thomas Ward Kitchen -----	Greenville	Hamilton Earle Russell -----	Easley
Francis Williamson McMillan --	Mullins	George Arthur Smith -----	Anderson
Philip Hudson Miller -----	Tatum	William Gladden Smoke -	St. Matthews
Dennis Leo Picklesimer -----	Piedmont	William Edward Tarrant ----	Piedmont

Textile Industrial Education

Troy Hudson Carter -----	Timmons ville	William Joel McKemie ---	Atlanta, Ga.
Charles Herbert Chreitzberg-	Williamston	Samuel Moffatt McKeown ----	Cornwell
Dewey Andrell Gibson -	Morrisville, N. C.	Daniel Park Thomson, Jr. -----	Seneca

OTHER DEGREES AWARDED JUNE 7, 1927

BACHELOR OF SCIENCE

Agriculture

Dr. Thomas Henderson Byrnes -----	Charleston, S. C.
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Arts and Science

Jesse O. Wingard -----	Great Falls, S. C.
Dr. Johnny A. Norris -----	Lakeland, Fla.

Civil Engineering

Leon Kenneth Richards -----	Atlantic, Iowa
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Mechanical and Electrical Engineering

Dr. Mylnor Wilbur Beach -----	Charleston, S. C.
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STUDENT REGISTER

The names are arranged in alphabetical order, and following the names are symbols indicating classes and courses. The numerals preceding the course symbols refer to classes, viz.; 1, Freshman; 2, Sophomore; 3, Junior; 4, Senior. A—Agriculture (numeral following A indicates major course for seniors): 1 Agronomy; 2 Animal Husbandry; 3 Agricultural Chemistry; 4 Dairy Husbandry; 5 Agricultural Education; 6 Entomology; 7 Horticulture. A&S—Arts and Science. Ar—Architecture. C—Chemistry. E—Engineering (all engineering freshmen, electrical and mechanical sophomore and junior classes). CE—Civil Engineering. EE—Electrical Engineering. ME—Mechanical Engineering. PM—Pre-Medical. T—Textile. TIE—Textile Industrial Education. GS—General Science. S—Special.

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Abbott, W. B. (4 CE)	Oconee	Walhalla
Abell, R. W. (1 E)	Chester	Lowrys
Abercrombie, E. W. (1 A&S)	Laurens	Gray Court
Able, E. W. (1 E)	Saluda	Saluda
Acker, T. F. (4 A&S)	Anderson	Anderson
Acker, W. H. (3 E)		Mount Vernon, N. Y.
Adams, G. G. (2 CE)	Lexington	Batesburg
Adams, H. (3 Ar)	Oconee	Seneca
Adams, J. G. (1 A&S)	York	Rock Hill
Adams, James L. (3 TIE)	York	Rock Hill
Adams, Joe L. (3 CE)	McCormick	Meriwether
Adams, O. A. (2 T)	Pickens	Pickens
Albergotti, J. C. (4 CE)	Oconee	Clemson College
Albright, C. H. (3 Ar)	Laurens	Laurens
Alexander, J. M. (1 T)	Oconee	Newry
Alexander, R. C. (3 A)	Pickens	Calhoun
Allen, C. C. (1 E)	Clarendon	Summerton
Allen, J. K. (1 A)	Edgefield	Edgefield
Allison, J. H. (2 A)	Greenville	Greenville
Allison, L. D. (4 Ar)	Greenville	Greenville
Allison, L. M. (1 E)	Richland	Columbia
Allsbrook, C. C. (2 A)	Sumter	Wedgfield
Anderson, G. M. (2 E)	Allendale	Fairfield
Anderson, J. B. (1 E)	Marlboro	Bennettsville
Anderson, L. (3 E)		Auburndale, Fla.
Anderson, M. H. (4 A2)	Florence	Timmons ville
Anderson, R. N. (4 EE)	Richland	Columbia
Anderson, T. C. (3 E)	Greenwood	Ninety Six
Anderson, T. P. (1 E)	Oconee	Seneca
Andrews, G. T. (3 CE)	Laurens	Fountain Inn
Andrews, M. P. (3 E)		Flat Rock, N. C.
Arial, J. H. (2 E)	Pickens	Easley
Armstrong, E. (2 CE)	Greenville	Fountain Inn
Asbill, H. W. (2 E)	Richland	Columbia
Asbill, L. M. (3 A)	Saluda	Ridge Springs
Askins, J. H. (2 T)	Florence	Timmons ville
Atkinson, J. M. (4 Ar)	Florence	Florence
Atkinson, J. R. (2 E)	Sumter	Hagood

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Attaway, J. C. (2 T)	Allendale	Appleton
Auld, F. M. (1 E)	Fairfield	Ridgeway
Aull, G. H. (S.)	Oconee	Clemson College
Aull, L. E. (1 A)	Newberry	Pomaria
Avent, J. J. (4 CE)	Marlboro	Bennettsville
Ayers, R. G. (3 A)	Horry	Tabor, N. C.
Bailey, M. C. (2 E)	Pickens	Pickens
Baker, T. (2 T)	Lancaster	Lancaster
Ballentine, W. F. (1 A)	Richland	Ballentine
Bannister, F. M. (2 E)	Greenwood	Greenwood
Bankhead, W. W. (4 A&S)	Chester	Lowrys
Barber, H. S. (3 T)	Spartanburg	Clifton
Barber, J. C. (1 E)	Chester	Chester
Barfield, W. J. (2 T)	Bamberg	Denmark
Barker, H. L. (1 E)	Allendale	Fairfax
Barnes, V. M. (2 A&S)	Anderson	Anderson
Barnes, W. C. (2 A)	Hampton	Brunson
Barnette, G. W. (1 A)	Greenville	Tailors
Barnwell, W. M. (1 E)	Charleston	Yonges Island
Barron, W. H. (4 ME&EE)	York	York
Barton, C. R. (3 T)	Anderson	Anderson
Barton, L. S. (4 Ar)	Orangeburg	Orangeburg
Bates, H. C. (1 T)	Greenville	Marietta
Bates, J. M. L. (2 A&S)		Nashville, Tenn.
Bates, J. N. (2 A)	Greenville	Travelers Rest
Batson, D. L. (3 T)	Greenville	Greenville
Bauknight, H. D. (1 T)	Abbeville	Abbeville
Beach, A. W. (1 E)	Colleton	Walterboro
Bearden, C. E. (4 A4)	Oconee	Seneca
Beason, G. E. (2 A)	Greenville	Simpsonville
Beason, J. T. (4 A4)	Greenville	Simpsonville
Beason, R. T. (2 A)	Spartanburg	Woodruff
Bell, J. D. (2E)	Richland	Columbia
Bell, J. L. (4 T)	Anderson	Anderson
Bell, T. J. (1 A)	Darlington	Lamar
Bennett, H. P. (2 CE)	Spartanburg	Enoree
Bennett, J. E. (1 T)	Greenville	Greenville
Berry, L. E. (4 A&S)	Spartanburg	Moore
Bethea, O. W. (2 Ar)		Orlando, Fla.
Bethea, T. J. (4 A4)	Marlboro	McColl
Betsworth, W. B. (1 E)	Anderson	Anderson
Bevill, J. B. (2 E)	Anderson	Anderson
Bickley, B. L. (4 CE)	Bamberg	Ehrhardt
Bishop, P. D. (2 A&S)	Union	Sedalia
Bishop, R. L. (2 C)	Spartanburg	Inman
Bishop, W. A. (4 CE)	Union	Union
Black, C. S. (2 E)	Anderson	Honea Path
Black, G. A. (3 E)	Laurens	Clinton
Black, O. W. (1 A)	Saluda	Batesburg
Black, P. J. (2 T)	Greenville	Greenville
Black, R. E. (1 E)	Newberry	Prosperity
Blackman, J. M. (3 TIE)	Anderson	Pendleton
Blackman, W. H. (2 A)	Kershaw	Bethune
Blackwell, J. D. (3 A&S)	Sumter	Mayesville
Blackwell, T. J. (4 A2)	Williamsburg	Andrews
Blaine, J. M. (1 A&S)	Fairfield	Blackstock

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Blake, L. D. (1 A)	Anderson	Belton
Blakeney, C. R. (3 T)	Lancaster	Lancaster
Blankenship, J. M. (2 E)	York	Rock Hill
Bleckley, B. B. (4 A&S)	Anderson	Anderson
Blitch, E. W. (3 E)	Charleston	North Charleston
Bodie, L. A. (2 E)	Saluda	Batesburg
Boggs, N. L. R. (2 A)	Pickens	Calhoun
Boleman, R. (3 E)	Anderson	Townville
Bolen, G. C. (1 E)	Orangeburg	Rowesville
Bonnette, C. B. (1 A)	Orangeburg	Orangeburg
Boone, C. F. (1 A)	Orangeburg	Rowesville
Booth, H. C. (1 E)	Sumter	Sumter
Booth, S. H. (1 E)	Greenwood	Ninety Six
Boseman, J. C. (4 ME)	Darlington	Darlington
Bostick, D. R. (2 E)	Beaufort	Beaufort
Bouknight, F. C. (2 A)	Richland	Irmo
Bouknight, V. A. (2 A&S)	Newberry	Newberry
Bowles, M. G. (1 E)	Greenwood	Greenwood
Boyd, H. L. (2 Ar)	Laurens	Clinton
Boykin, J. S. (2 A)	Lee	Rembert
Boynton, J. A. (1 A)	Colleton	Whitehall
Bozeman, A. N. (1 T)	Greenville	Greenville
Bradberry, L. C. (1 E)	Oconee	Seneca
Bramlett, J. I. (1 A)	Greenville	Tailors
Brannon, R. R. (3 C) .....	.....	Ashburn, Ga.
Brant, J. B. (2 E)	Allendale	Ulmers
Breazeale, J. M. (2 A)	Anderson	Belton
Breeland, B. H. (1 E)	Orangeburg	Holly Hill
Britt, C. E. (4 CE)	McCormick	McCormick
Britt, J. O. (3 A)	Darlington	Timmons ville
Brock, A. E. (1 E)	Clarendon	Summerton
Brock, A. P. (1 A)	Anderson	Belton
Brogdon, W. J. (4 EE)	Sumter	Sumter
Brown, B. C. (1 E)	Lee	Elliott
Brown, J. F. (1 T) .....	.....	Hartwell, Ga.
Brown, J. S. (2 CE)	Kershaw	Camden
Brown, J. W. (1 E)	Union	Jonesville
Bryan, C. A. (4 A7)	Allendale	Allendale
Bryant, J. W. (1 T)	Spartanburg	Cowpens
Bryce, E. C. (2 PM)	Florence	Florence
Bryce, G. T. (4 Ar)	Florence	Florence
Bryson, G. T. (1 T)	Laurens	Ora
Buffkin, M. R. (3 A)	Horry	Green Sea
Buford, J. A. (4 A&S)	Laurens	Clinton
Burdett, C. M. (3 A)	Greenville	Simpsonville
Burdett, J. W. (2 A)	Greenville	Simpsonville
Burgess, E. F. (1 A)	Anderson	Belton
Burgess, R. H. (4 A3)	Anderson	Belton
Burns, F. A. (1 A)	York	Smyrna
Burns, O. W. (2 E)	York	York
Burriss, J. L. (3 T)	Anderson	Anderson
Burriss, L. J. (4 ME)	Anderson	Anderson
Butler, J. I. (2 E)	Greenville	Greenville
Byrd, E. C. (2 E)	Orangeburg	Branchville
Byrd, H. P. (2 T)	Darlington	Darlington
Byrd, H. P. (1 A)	Darlington	Society Hill

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Byrd, H. S. (3 A)	Darlington	Hartsville
Byrd, J. F. (1 PM)	Edgefield	Edgefield
Cain, S. D. (3 A)	Sumter	Sumter
Caldwell, A. P. (1 E)	Spartanburg	Landrum
Caldwell, J. L. (1 T)	Spartanburg	Drayton
Caldwell, M. B. (1 PM)	Colleton	Walterboro
Callaham, J. F. (3 E)	Greenville	Greenville
Calvert, W. M. (1 T)	Anderson	Belton
Camp, M. J. (1 A)	Cherokee	Gaffney
Camp, W. J. (3 A)	Cherokee	Gaffney
Campbell, J. (1 A)	Dillon	Dillon
Campbell, L. (2 A)	Colleton	Smoaks
Campbell, T. A. (4 TIE)	Anderson	Anderson
Campbell, W. M. (2 PM)	York	Tirza
Campell, M. M. (4 T)	Greenville	Greenville
Cannon, F. W. (1 A)	Anderson	Honea Path
Carpenter, J. S. (2 T)	Spartanburg	Landrum
Carroll, G. H. (4 A3)	York	York
Carson, A. F. (2 A)	Pickens	Central
Carter, D. C. (2 T)	Laurens	Clinton
Carter, Jack, (2 A)	Colleton	Lodge
Carter, L. J. (1 A)	Horry	Loris
Carter, R. C. (3 E)	Orangeburg	Cope
Carter, W. H. (4 A5)	Bamberg	Lodge
Carter, W. J. (1 A)	Darlington	Lamar
Carver, J. J. (4 ME)	Spartanburg	Fairforest
Casey, R. B. (1 A)	Anderson	Anderson
Castles, E. J. (1 A)	York	Smyrna
Cato, J. B. (3 CE)	Chesterfield	Pageland
Caughman, G. W. (1 A)	Lexington	Lexington
Caughman, J. M. (3 Ar)	Richland	Columbia
Caughman, M. J. (3 TIE)	Marion	Mullins
Caughman, M. W. (1 E)	Lexington	Lexington
Causey, H. C. (3 E)	Horry	Tabor, N. C.
Chamblee, J. C. (1 A)	Anderson	Anderson
Chamblee, L. C. (2 CE)	Anderson	Anderson
Chandler, R. A. (1 PM)	Clarendon	Manning
Chapman, B. S. (1 T)	Anderson	Pendleton
Chapman, H. A. (3 A)	Anderson	Belton
Chapman, J. L. (1 E)	York	Rock Hill
Cheek, V. L. (3 Ar)	Cherokee	Blacksburg
Childers, J. C. (1 T)	Greenville	Greenville
Childress, G. M. (2 T)	Greenville	Tailors
Childs, J. B. (2 A&S)	Pickens	Central
Chisholm, J. R. (2 A&S)	Hampton	Garnett
Chitty, M. G. (3 CE)	Orangeburg	Norway
Chrietzberg, B. K. (2 A&S)	Anderson	Williamston
Chumley, C. A. (2 T)	Laurens	Laurens
Clark, D. R. (1 A)	Chesterfield	Angelus
Clark, J. H. (4 EE)	Abbeville	Calhoun Falls
Clark, J. L. (1 T) .....	.....	Toccoa, Ga.
Clarke, W. H. (4 A6)	Anderson	Pendleton
Clary, F. E. (3 CE)	Cherokee	Gaffney
Clayton, J. M. H. (2 A)	Pickens	Liberty
Clayton, L. O. (1 A)	Pickens	Pickens

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Clement, R. W. (1 E)	Anderson	Honea Path
Clement, W. P. (2 T)	Spartanburg	Spartanburg
Clippard, J. H. (2 E)	Spartanburg	Spartanburg
Cloaninger, C. E. (1 A)	Richland	Lykesland
Clyburn, E. S. (2 CE)	Lancaster	Lancaster
Clyburn, T. M. (3 A)	Lancaster	Lancaster
Clyburn, W. P. (3 C)	Lancaster	Lancaster
Cobb, D. J. (1 E)	Richland	Columbia
Cobb, G. P. (3 E)	Pickens	Easley
Cochran, F. R. (2 E)	Anderson	Anderson
Cochran, J. H. (3 A)	Greenwood	Donalds
Cochran, J. W. (2 A)	Clarendon	Manning
Cochran, J. W. (1 E)	Oconee	Seneca
Cohen, J. J. (2 Ar) .....	.....	Augusta, Ga.
Colcock, W. F. (1 E)	Beaufort	Beaufort
Cole, L. D. (1 T)	Florence	Timmons ville
Coleman, J. M. (2 E)	Horry	Gallivants Ferry
Coleman, M. J. (2 PM)	Florence	Hyman
Collins, J. W. (1 E)	Bamberg	Denmark
Coln, W. A. (1 A)	Chester	Chester
Comer, R. F. (2 T)	Union	Jonesville
Conder, W. W. (1 A)	Richland	Columbia
Cook, C. R. (3 A)	York	Fort Mill
Cook, J. A. (1 T) .....	.....	Augusta, Ga.
Cook, L. A. (3 A&S)	Laurens	Fountain Inn
Cook, W. T. (1 T)	Greenwood	Greenwood
Cooley, T. F. (4 A4)	Abbeville	Lowndesville
Cooper, R. G. (1 E)	Sumter	Sumter
Cooper, W. A. (3 A&S)	Bamberg	Denmark
Copeland, B. L. (2 CE)	Florence	Timmons ville
Copeland, T. H. (3 A)	Laurens	Clinton
Corley, C. E. (2 CE)	Lexington	Lexington
Corley, J. S. (2 A)	Saluda	Saluda
Corley, S. R. (4 A5)	Lexington	Lexington
Corley, W. H. (1 E)	Greenwood	Greenwood
Corn, H. P. (1 T)	Anderson	Anderson
Cornwall, B. V. (3 C) .....	.....	Alto, Ga.
Council, J. B. (S.) .....	.....	Salisbury, N. C.
Courtney, J. H. (3 Ar)	Aiken	Aiken
Coward, H. C. (1 A)	Aiken	Aiken
Cox, R. C. (2 A)	Spartanburg	Woodruff
Craig, W. D. (2 E)	Lancaster	Lancaster
Crain, W. C. (1 T)	Greenville	Greer
Craven, W. B. (3 A)	Marion	Gresham
Crawford, A. R. (1 A&S)	Saluda	Saluda
Crawford, A. W. (2 A)	Pickens	Calhoun
Crawford, B. H. (1 T)	Union	Union
Crawford, J. P. (1 Ar) .....	.....	Nashville, Tenn.
Crawford, W. S. (2 A)	Pickens	Clemson College
Crook, M. D. (4 CE)	York	Fort Mill
Crouch, W. M. (1 A&S)	Saluda	Saluda
Crout, W. H. (1 T)	Lexington	Edmund
Crowther, J. C. (1 A)	Anderson	Anderson
Crutchfield, C. E. (1 E)	Orangeburg	Orangeburg
Crymes, F. H. (1 C)	Greenwood	Greenwood
Culler, W. C. (1 A)	Orangeburg	Orangeburg

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Cunningham, H. W. (3 CE)	Lee	Bishopville
Cunningham, J. W. (4 Ar)	Sumter	Sumter
Cuttino, B. H. (4 EE)	Sumter	Sumter
Cuttino, D. S. (4 Ar)		Newnan, Ga.
Cuttino, W. H. (4 EE)	Greenville	Greenville
Daniel, M. R. (3 A&S)	Darlington	Hartsville
Dantzler, J. L. (2 Ar)	Barnwell	Elko
Dargan, W. C. (4 A7)	Darlington	Darlington
Dashiell, T. I. (1 T)	Spartanburg	Spartanburg
David, A. J. (1 E)	Marlboro	Bennettsville
Davidson, J. S. (1 A&S)	Kershaw	Camden
Davis, B. W. (3 CE)	Greenville	Greenville
Davis, B. W. (1 E)	Charleston	Martins Point
Davis, D. T. (1 E)		Toccoa, Ga.
Davis, G. N. (3 CE)	Marion	Centenary
Davis, H. B. (1 A)	Darlington	Darlington
Davis, H. L. (3 A)	Spartanburg	Spartanburg
Davis, J. L. (2 E)	Oconee	Walhalla
Davis, J. N. (3 A)	Laurens	Ware Shoals
Davis, O. (1 A)	Darlington	Darlington
Davis, R. R. (4 EE)		Toccoa, Ga.
Davis, St. C. (3 CE)	Marion	Centenary
Davis, T. B. (1 E)	Darlington	Darlington
Davis, T. C. (2 A&S)	Greenville	Greer
Day, W. G. (1 T)	Spartanburg	Cowpens
Deadwyler, W. C. (2 E)	Greenwood	Greenwood
Deer, H. G. (2 A)	Charleston	Yonges Island
Dial, W. A. (4 ME)	Laurens	Cross Hill
Dickinson, G. M. (3 C)	Bamberg	Bamberg
Dickson, R. W. (3 A)	Clarendon	Manning
Dill, H. W. (1 A)	Greenville	Taylors
Dill, T. E. (3 T)	Greenville	Greenville
Dobson, J. H. (2 CE)	Lancaster	Lancaster
Donald, R. E. (1 T)	Anderson	Williamston
Dorrity, M. A. (2 A)	Darlington	Timmons ville
Dorset, H. W. (2 E)	Saluda	Ridge Spring
Douglas, G. A. (1 E)	Abbeville	Abbeville
Dowdle, H. J. (1 A)	York	Hickory Grove
Dozier, G. L. (1 C)	Spartanburg	Spartanburg
Drake, H. B. (4 CE)	Anderson	Pelzer
Drake, W. S. (2 T)	Anderson	Honea Path
Dreher, J. H. (1 E)	Calhoun	St. Matthews
Drummond, L. J. (2 CE)	Greenville	Fountain Inn
DuBard, R. M. (1 T)	Richland	Blythewood
DuBose, W. P. (3 E)	Darlington	Darlington
Ducker, F. C. (2 E)	Sumter	Sumter
Duffie, F. H. (3 A)	Saluda	Saluda
Duggan, I. W. (S.)	Oconee	Seneca
Dukes, V. (2 E)	Orangeburg	Branchville
Dunlap, G. H. (4 TIE)	York	Ogden
Dunlap, O. P. (2 A)	Anderson	Honea Path
DuPre, A. J. (3 A&S)	Richland	Columbia
DuPre, E. C. (2 CE)	Richland	Columbia
DuRant, C. (2 E)	Clarendon	Manning
Durst, G. G. (2 A)	Greenwood	Greenwood
Durst, W. P. (4 T)	Greenwood	Greenwood
Dyess, A. J. (1 Ar)	Aiken	North Augusta

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Eaddy, J. M. (3 A)	Florence	Leo
Eadie, M. D. (4 T) .....	.....	Brunswick, Ga.
Earle, E. P. (1 A&S)	Pickens	Clemson College
Earle, S. B. (2 Ar)	Oconee	Clemson College
Early, E. B. (4 A1)	Orangeburg	Orangeburg
Edwards, B. L. (3 CE)	Laurens	Fountain Inn
Edwards, G. L. (1 E)	Darlington	Hartsville
Eison, F. J. (3 E)	Union	Jonesville
Ellis, C. A. (1 A)	Abbeville	Due West
Ellis, E. S. (4 A&S)	Greenwood	Greenwood
Ellis, J. T. (3 A)	Spartanburg	Woodruff
Ellis, T. E. (1 A)	Abbeville	Due West
Elvington, P. L. (2 A)	Horry	Nichols
Epting, E. E. (1 A)	Newberry	Little Mountain
Epting, E. L. (3 E)	Newberry	Peak
Epting, G. H. (1 Ar)	Newberry	Newberry
Epton, G. H. (2 Ar)	Spartanburg	Spartanburg
Eskew, H. L. (4 EE)	Greenville	Greenville
Eskew, J. G. (1 E)	Greenville	Greenville
Estes, W. M. (1 E)	Fairfield	Winnsboro
Evans, D. D. (3 E)	Florence	Pamplico
Evans, L. C. (2 E)	Orangeburg	Orangeburg
Evans, M. B. (1 E)	Beaufort	Beaufort
Eve, E. A. (1 E)	Beaufort	Burton
Fagan, J. E. (1 A)	Spartanburg	Campobello
Fagg, T. H. (1 A)	Anderson	Anderson
Fant, T. E. (1 E)	Anderson	Anderson
Farmer, R. E. (4 CE)	Florence	Florence
Farr, F. B. (2 CE) .....	.....	Brunswick, Ga.
Farrar, M. B. (4 A&S)	Spartanburg	Spartanburg
Faulkenberry, G. E. (3 T)	York	Rock Hill
Fellers, H. N. (1 E)	Newberry	Chappells
Fennell, C. S. (4 CE)	Hampton	Hampton
Fennell, J. R. (S)	York	Rock Hill
Fennell, W. E. (1 A)	Hampton	Hampton
Ferguson, J. E. (3 Ar)	Laurens	Clinton
Ferguson, J. G. (2 Ar)	York	York
Ferguson, S. T. (1 A)	York	York
Ferguson, T. F. (4 A1)	Abbeville	Abbeville
Few, J. P. (1 T)	Greenville	Greer
Fike, C. W. (3 A&S)	Spartanburg	Spartanburg
Finly, W. H. (1 A)	Laurens	Ware Shoals
Finn, P. S. (2 CE)	Sumter	Sumter
Fishburne, I. G. (4 A2)	Colleton	Walterboro
Fisher, J. H. (2 A)	Abbeville	Antreville
Fleming, W. H. (1 A)	Laurens	Lanford
Fogle, J. L. (4 A7)	Bamberg	Denmark
Folk, H. D. (1 E)	Orangeburg	Holly Hill
Ford, A. H. (2 CE)	Georgetown	Georgetown
Ford, J. G. (4 A5)	Dillon	Lake View
Foster, W. M. (2 E)	Spartanburg	Chesnee
Fowler, B. R. (4 A)	Greenville	Greenville
Fraser, B. P. (3 E)	Georgetown	Georgetown
Fraser, C. A. (2 T)	Greenville	Greenville
Freeman, B. (2 A)	Pickens	Clemson College
From, E. (1 A&S)	Union	Union

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Funderburke, O. F. (3 TIE)	Chester	Great Falls
Funderburke, W. N. (1 T)	Chester	Great Falls
Furman, C. M. (1 Ar)	Greenville	Greenville
Furman, H. J. (1 A)	Greenville	Greenville
Gaines, F. P. (3 CE)	Oconee	Westminster
Gaines, J. P. (1 A)	Pickens	Central
Gallman, R. E. (1 A)	Union	Kelton
Galloway, C. W. (2 A)	Darlington	Hartsville
Galloway, J. C. (3 Ar)	Lee	Lynchburg
Galloway, W. B. (2 A&S)	Lee	Lynchburg
Galloway, W. C. (4 ME)	Greenville	Greenville
Gantt, J. H. (4 EE)	Pickens	Pickens
Garner, J. R. (1 T)	Greenville	Greenville
Garrett, C. W. (1 PM)	Greenwood	Greenwood
Garrison, B. F. (2 A)	Anderson	Anderson
Garrison, J. C. (4 CE)	Pickens	Easley
Gassaway, J. L. (2 A)	Anderson	Anderson
Gassaway, M. B. (2 A)	Anderson	Honea Path
Gault, H. S. (4 A&S)	Spartanburg	Glendale
Geddings, E. N. (4 A3)	Sumter	Sumter
Geddings, M. T. (2 E)	Sumter	Wedgfield
George, R. H. (1 E)	Lexington	Lexington
Gibson, C. F. (1 T)		LaGrange, Ga.
Gibson, J. R. (3 CE)	Greenville	Greenville
Gibson, J. D. (1 E)	Greenville	Greenville
Gibson, P. R. (3 A)	Chester	Great Falls
Gillam, J. C. (1 A)	Bamberg	Denmark
Gillespie, D. D. (4 CE)	Oconee	Seneca
Gillespie, J. L. (1 T)	Richland	Columbia
Glaze, C. H. (4 CE)		Hendersonville, N. C.
Godfrey, A. B. (4 A5)	Cherokee	Gaffney
Goff, A. T. (1 A)	Saluda	Leesville
Goldsmith, G. W. M. (1 E)	Greenville	Piedmont
Graham, A. M. (1 A)	Anderson	Honea Path
Graham, L. H. (3 E)	Anderson	Anderson
Grainger, A. D. (1 A)	Horry	Loris
Gramling, B. E. (1 A)	Orangeburg	Orangeburg
Gramling, W. E. (1 A)	Orangeburg	Orangeburg
Grant, W. C. (1 E)	Chester	Chester
Graves, J. A. (2 E)	Abbeville	Abbeville
Gray, J. W. (3 T)	Darlington	Darlington
Green, C. A. (2 T)	Anderson	Anderson
Green, C. D. (4 T)	Spartanburg	Spartanburg
Green, D. N. (1 E)	Sumter	Sumter
Green, J. L. (1 T)	Anderson	Anderson
Gregg, C. E. (2 T)	Florence	Mars Bluff
Griffin, T. G. (1 E)	Lee	Lynchburg
Griffin, T. H. (1 E)	Orangeburg	Cope
Grimsley, C. L. (2 E)	Marion	Mullins
Gunnells, C. (2 A)	Bamberg	Ola
Guy, J. H. (4 Ar)	Richland	Columbia
Guy, J. L. (2 T)	Richland	Columbia
Guy, J. W. (3 A)	Chester	Chester

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Hafers, E. P. (4 EE)	Aiken	Aiken
Hagood, G. B. (1 E)	Fairfield	Winnsboro
Hair, H. B. (2 Ar)	Calhoun	North
Hair, J. C. (4 C)	Barnwell	Blackwell
Hall, R. M. (3 E)	Anderson	Pendleton
Hallman, J. F. (1 PM)	Union	Lockhart
Ham, T. H. (1 T)	Darlington	Darlington
Hamer, R. P. (1 E)	Florence	Timmons ville
Hammond, F. O. (1 A)	Lancaster	Kershaw
Hamilton, J. M. (2 CE)	Aiken	Graniteville
Hammett, H. T. (2 E)	Greenville	Tailors
Hammett, R. D. (3 E)	Sumter	Sumter
Hane, A. W. (4 A7)	Calhoun	St. Matthews
Hane, H. T. (4 A7)	Calhoun	Ft. Motte
Hane, W. W. (2 A)	Calhoun	Ft. Motte
Hanes, R. A. (2 A)	Dillon	Dillon
Hanner, T. G. (4 CE)	Florence	Florence
Hardee, H. M. (4 EE)	Chester	Lowrys
Harper, C. A. (1 Ar)	Hampton	Estill
Harper, J. L. (3 CE)	Spartanburg	Spartanburg
Harper, S. B. (2 E)	Anderson	Anderson
Harrell, C. W. (1 E)	Richland	Columbia
Harrell, J. C. (4 Ar)	Marion	Marion
Harrington, R. C. (4 T)	Williamsburg	Greeleyville
Harris, G. (1 PM)	Cherokee	Blacksburg
Harris, J. M. (1 E)	Anderson	Anderson
Harris, S. P. (4 A5)	Anderson	Belton
Harrison, W. S. (4 TIE)	Spartanburg	Moore
Hart, F. (1 E)	Orangeburg	Vance
Hart, J. L. (1 E)	Spartanburg	Spartanburg
Hart, L. W. (4 A7)	Orangeburg	Vance
Harter, J. W. (3 PM)	Allendale	Fairfax
Harvey, B. C. (3 A&S)	Cherokee	Gaffney
Harvey, F. H. (1 A&S)	Cherokee	Gaffney
Harvin, J. B. (S. T)	Clarendon	Manning
Harvin, S. A. (3 A)	Sumter	Sumter
Hawkins, J. F. (3 A)	Florence	Timmons ville
Hayes, R. A. (2 E)	Anderson	Anderson
Hays, G. L. (1 A)	Anderson	Starr
Hays, W. L. (2 T)	Anderson	Starr
Heard, L. M. (4 A&S)	Anderson	Belton
Hearn, H. R. (1 Ar)	Greenville	Greenville
Heller, H. (3 A&S)	Oconee	Seneca
Heller, J. N. (4 EE)	Anderson	Sandy Springs
Hembree, E. E. (2 E)	Charleston	Ravenel
Henderson, T. W. (1 E)	Greenwood	Ninety Six
Henderson, W. N. (4 TIE)	Greenwood	Verdery
Hendrix, L. E. (1 A&S)	Pickens	Easley
Hendrix, F. F. (2 A)	Greenville	Greenville
Hendrix, F. H. (2 A)	Lexington	Leesville
Hendrix, H. B. (2 A)	Lexington	Lexington
Hendrix, J. P. (3 A)	Spartanburg	Duncan
Herlong, H. M. (1 Ar)	Edgefield	Johnston
Herlong, H. P. (1 A)	Saluda	Ward
Herndon, G. B. (2 A)	Colleton	Walterboro
Herring, W. H. (4 Ar)	Marion	Marion

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Heustess, J. H. (2 A)	Darlington	Hartsville
Hewer, W. F. (2 A)	Pickens	Clemson College
Hewitt, B. L. (2 A)	Darlington	Darlington
Heyward, T. S. (1 E)	Lexington	Batesburg
Hicks, J. A. (2 CE)	Darlington	Hartsville
Hicks, J. O. (4 Ar) .....	.....	Lexington, N. C.
Hicks, W. L. (1 E)	Greenville	Greenville
Higgins, E. E. (3 Ar)	Pickens	Easley
Higgins, J. F. (1 PM)	Cherokee	Gaffney
Higgins, R. C. (4 EE)	Georgetown	Georgetown
Hightower, R. E. (4 EE)	Bamberg	Denmark
Hiller, B. K. (2 CE)	Richland	Chapin
Hines, A. M. (2 CE) .....	.....	Auburndale, Fla.
Hinson, L. O. (2 CE)	Florence	Scranton
Hinson, R. L. (2 PM)	Florence	Scranton
Hitt, G. L. (2 T)	Anderson	Belton
Hodge, W. D. (1 A)	Clarendon	Alcolu
Hodges, R. G. (2 CE)	Marion	Marion
Hoefer, H. W. (3 E)	Richland	Columbia
Hoffman, G. C. (1 E)	Bamberg	Bamberg
Holland, W. G. (3 E)	Colleton	Walterboro
Hope, G. M. (3 A&S)	Bamberg	Denmark
Hope, T. A. (2 E)	York	Smith's Turnout
Horton, R. G. (2 A)	Chesterfield	Jefferson
Horry, H. H. (1 A)	Jasper	Ridgeland
Huff, W. B. (2 CE)	Kershaw	Camden
Howard, R. S. (2 CE) .....	.....	Savannah, Ga.
Howard, W. F. (2 PM)	Spartanburg	Lyman
Howe, G. O. (1 T)	Chester	Great Falls
Howle, R. M. (3 A)	Darlington	Hartsville
Hudgens, A. R. (1 PM)	Anderson	Pelzer
Hudgens, D. C. (1 A&S)	Pickens	Central
Hudgens, E. S. (2 E) .....	.....	Flat Rock, N. C.
Hudgens, J. A. (2 A) .....	.....	Flat Rock, N. C.
Hudgens, J. D. (1 E)	Anderson	Williamston
Hudgens, W. W. (4 Ar)	Anderson	Williamston
Hudson, G. E. (4 A6)	Spartanburg	Spartanburg
Huff, J. C. (1 E)	Greenville	Simpsonville
Huff, L. T. (2 T)	Greenville	Piedmont
Huggins, J. P. (2 A)	Horry	Nichols
Hughes, W. F. (2 E)	York	Rock Hill
Hughston, T. L. (4 CE)	Spartanburg	Spartanburg
Humphrey, C. J. (4 CE)	Florence	Timmons ville
Hunt, D. W. (2 CE)	Greenville	Greenville
Hunter, R. L. (2 T)	Laurens	Clinton
Hunter, W. I. (2 E)	Orangeburg	Orangeburg
Husbands, H. (4 CE)	Florence	Florence
Hutchins, G. S. (4 A&S)	Spartanburg	Spartanburg
Hutchins, W. C. (4 ME)	Spartanburg	Spartanburg
Hutchinson, J. T. (1 A&S)	Pickens	Easley
Jackson, C. A. (3 CE)	Sumter	Horatio
Jackson, H. L. (2 A)	Sumter	Horatio
Jackson, L. S. (4 EE)	Orangeburg	Orangeburg
Jackson, M. P. (2 E)	Florence	Florence
Jackson, O. W. (1 E)	Orangeburg	Neeses

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
James, W. C. (4 A5)	Greenville	Greer
Jameson, A. O. (1 E)	Anderson	Liberty
Jameson, P. H. (4 A5)	Anderson	Liberty
Jarrard, C. E. (1 E)	Greenville	Greenville
Jay, A. S. (1 T) .....	.....	Elberton, Ga.
Jeffers, R. (3 A)	Orangeburg	Holly Hill
Jenkins, J. M. (3 A) .....	.....	Crowley, La.
Jennings, J. G. (1 T)	Richland	Columbia
Jeter, E. C. (4 A3)	Fairfield	Wallaceville
Johnson, E. V. (3 A&S)	Spartanburg	Arcadia
Johnson, H. E. (4 T)	Anderson	Anderson
Johnson, M. F. (1 E)	Union	Union
Jolly, R. A. (2 A)	Anderson	Anderson
Jones, A. S. (4 ME)	Oconee	Walhalla
Jones, D. S. (1 CE)	Anderson	Anderson
Jones, F. L. (2 A)	Anderson	Starr
Jones, F. N. (2 A&S)	Colleton	Ashton
Jones, H. W. (3 A)	Aiken	Aiken
Jones, J. A. (4 ME)	Florence	Florence
Jones, J. F. (2 A)	Fairfield	Bookman
Jones, J. G. (4 A5)	Spartanburg	Crescent
Jones, L. E. (3 E)	Pickens	Dacusville
Jones, M. A. (4 EE)	Richland	Columbia
Jones, N. D. (S T) .....	.....	Humboldt, Tenn.
Jones, M. H. (4 A&S)	Florence	Florence
Jones, M. W. (2 A&S) .....	.....	Augusta, Ga.
Jones, R. M. (1 A)	Colleton	Ashton
Jones, R. M. (2 A)	Anderson	Starr
Jones, S. E. (4 A6)	Greenville	Greer
Jordan, E. P. (3 A&S)	York	Rock Hill
Jordan, J. A. (4 A5)	Chester	Richburg
Jordan, L. W. (1 A)	Florence	Timmons ville
Josey, F. H. (2 E)	Lee	Bethune
Justus, J. H. (1 E)	Pickens	Pickens
Keisler, B. E. (2 A)	Lexington	Gilbert
Keith, J. A. (2 E)	Pickens	Pickens
Kellers, F. (2 E)	Laurens	Clinton
Kelley, D. L. (1 Ar)	Pickens	Central
Kelley, J. W. (2 E)	Anderson	Williamston
Kelley, W. G. (4 EE)	Anderson	Pelzer
Kennedy, J. A. (2 T)	Spartanburg	Spartanburg
Keyserling, L. L. (4 EE)	Beaufort	Beaufort
Killingsworth, H. M. (3 E)	Barnwell	Barnwell
Kinard, A. R. (2 E)	Bamberg	Ehrhardt
Kinard, W. R. (1 A)	Greenwood	Epworth
King, C. J. (3 TIE)	Sumter	Sumter
King, G. N. (2 A)	Oconee	Townville
King, J. L. (4 A4)	Anderson	Belton
King, W. W. (1 Ar)	Charleston	Charleston
Kinsler, J. F. (3 Ar)	Pickens	Central
Kinsler, R. T. (1 Ar)	Pickens	Central
Kirby, H. F. (1 C)	Dorchester	St. George
Kirby, L. B. (1 E)	Cherokee	Gaffney
Kirchner, F. G. (1 E)	Greenville	Greenville
Kirkland, R. C. (3 CE)	Bamberg	Ehrhardt

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Kirkley, F. E. (3 A)	Kershaw	Kershaw
Kish, J. L. (1 C)	Brooklyn, N. Y.	Brooklyn, N. Y.
Kitchens, C. W. (1 E)	Laurens	Laurens
Kizer, H. J. (1 A)	Dorchester	St. George
Kline, W. N. (3 C)	Savannah, Ga.	Savannah, Ga.
Klugh, G. F. (4 A&S)	Atlanta, Ga.	Atlanta, Ga.
Knight, L. E. (1 Ar)	Anderson	Belton
Knobloch, L. G. (4 A&S)	Charleston	Charleston
Knopf, B. A. (3 A&S)	Allendale	Fairfax
Knotts, E. I. (2 A)	Orangeburg	North
Knotts, R. E. (2 A)	Orangeburg	North
Knowles, T. S. (1 PM)	Miami, Fla.	Miami, Fla.
Koon, O. R. (4 A5)	Richland	Peak
Lachicotte, F. W. (3 E)	Charlotte, N. C.	Charlotte, N. C.
Lancaster, W. A. (2 E)	Allendale	Fairfax
Langford, C. H. (4 A2)	Richland	Blythewood
Langford, J. E. (1 A)	Oconee	West Union
Lanford, W. W. (1 E)	Laurens	Waterloo
Langston, W. A. (3 A)	Florence	Timmons ville
Latham, C. G. (4 A7)	York	York
Lathrop, H. A. (2 CE)	Charleston	Charleston
Lawrence, W. A. (1 A)	Pickens	Calhoun
Lawson, R. A. (3 E)	Charleston	Charleston
Lawton, J. M. (2 A&S)	Hampton	Garnett
Layton, W. H. (1 T)	Anderson	Anderson
Lee, F. W. (1 E)	Spartanburg	Spartanburg
Lee, H. M. (2 T)	Spartanburg	Landrum
Lee, L. L. (2 A)	Oconee	Walhalla
Leitner, L. T. (2 E)	Marion	Marion
Lemmon, J. L. (2 A)	Lee	Elliott
Lesesne, F. F. (4 A1)	Williamsburg	Greeleyville
Lesley, M. L. (1 E)	Pickens	Easley
Leslie, E. E. (1 A)	York	Rock Hill
Lester, J. E. (2 E)	Hogansville, Ga.	Hogansville, Ga.
Leverette, P. B. (3 E)	Richland	Columbia
Levin, J. D. (4 Ar)	Beaufort	Beaufort
Lewis, A. H. (1 A)	Horry	Loris
Lewis, C. H. (1 E)	Anderson	Belton
Lewis, C. S. (3 E)	Crowley, La.	Crowley, La.
Lewis, J. H. (1 E)	Estherwood, La.	Estherwood, La.
Lewis, O. C. (1 E)	Horry	Loris
Lide, J. S. (2 A)	Marlboro	Bennettsville
Ligon, J. C. (1 PM)	Greenville	Greenville
Lineberger, C. H. (4 CE)	Greenville	Greenville
Lineberger, J. M. (1 A)	Greenville	Greenville
Link, A. C. (4 T)	York	Fort Mill
Linton, W. T. (4 CE)	Pickens	Clemson College
Lipscomb, R. W. (4 A)	Cherokee	Gaffney
Livingston, E. M. (2 A)	Orangeburg	North
Livingston, J. D. S. (1 E)	Newberry	Silverstreet
Lloyd, O. W. (1 E)	Darlington	Lamar
Lollis, S. M. (1 T)	Anderson	Honea Path
Lomas, C. H. (4 A4)	Richland	Columbia
Long, E. (1 T)	Anderson	Iva
Long, J. A. (1 T)	Saluda	Saluda

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Long, R. F. (2 CE)	Fairfield	Blair
Long, M. L. (1 E)	Newberry	Silverstreet
Love, J. F. (2 A)	York	McConnellsville
Lowe, M. W. (1 A) .....	.....	Chadbourn, N. C.
Loman, G. C. (1 A)	Richland	Ballentine
Lupo, W. O. (3 A)	Dillon	Lake View
Lyon, C. F. (1 T)	Sumter	Sumter
Lyon, R. E. (1 A&S)	McCormick	Plum Branch
McAbee, T. R. (3 CE)	Spartanburg	Inman
McCarley, H. D. (2 A&S)	Richland	Columbia
McCarley, R. J. (2 CE)	Richland	Columbia
McCarley, T. H. (2 A&S)	Anderson	Anderson
McCarty, R. M. (1 E)	Saluda	Ward
McCauley, H. R. (3 E)	Greenville	Greenville
McCauley, J. H. (3 CE)	Greenville	Greenville
McClain, R. M. (3 A) .....	.....	Washington, D. C.
McClendon, G. B. (3 E)	Barnwell	Blackville
McClure, P. J. (2 CE)	Spartanburg	Cherokee
McComb, J. C. (2 A)	McCormick	Troy
McComb, J. R. (3 A)	Abbeville	Abbeville
McConnell, R. E. (4 A1)	Anderson	Anderson
McCravey, J. R. (2 PM)	Pickens	Easley
McCrorey, J. B. (2 A)	Chester	Richburg
McCutchen, G. H. (4 A1)	Lee	Bishopville
McDaniel, E. P. (2 E)	Pickens	Pickens
McDaniel, L. F. (2 Ar)	Richland	Columbia
McDonald, C. B. (1 E)	Oconee	Westminster
McDonald, E. M. (3 E)	Charleston	Charleston
McDowell, H. E. (4 CE)	York	Rock Hill
McDowell, S. T. (1 A&S)	York	Rock Hill
McElveen, A. T. (2 T)	Aiken	Langley
McFadden, J. J. (2 E)	Clarendon	Gable
McGee, H. A. (3 E)	Colleton	Walterboro
McGee, R. H. (1 A)	Anderson	Belton
McGee, R. L. (3 A)	Anderson	Belton
McGee, W. L. (2 A)	Anderson	Starr
McGill, T. J. (4 EE)	Richland	Columbia
McGlone, T. F. (4 A&S)	Spartanburg	Spartanburg
McIntosh, L. (2 A)	Darlington	Dovesville
McKerley, J. A. (1 E)	Barnwell	Elko
McKinney, J. W. (2 A)	Pickens	Easley
McLane, F. B. (1 E)	Abbeville	Abbeville
McLaurin, H. M. (1 A)	Sumter	Wedgfield
McLeod, J. B. (3 E)	Darlington	Hartsville
McLeod, V. C. (2 E)	Lee	Camden
McLeod, W. H. (2 A)	Beaufort	Beaufort
McLesley, J. J. (3 CE)	Oconee	Whitmire
McMeekin, C. L. (2 A&S)	Fairfield	Monticello
McMeekin, R. P. (4 CE)	Fairfield	Jenkinsville
McMillan, C. (2 A)	Saluda	Saluda
McMillan, H. V. (1 E)	Bamberg	Ehrhardt
McMillan, R. F. (3 A)	Abbeville	Abbeville
McPhail, J. W. (4 A5)	Anderson	Anderson
McPhail, S. (4 A5)	Anderson	Townville
McPherson, J. M. (2 E)	Georgetown	Georgetown

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
McSwain, W. B. (1 A)	Cherokee	Gaffney
McWhorter, W. J. L. (1 E)	Pickens	Norris
Macdowell, F. L. (1 E) .....	.....	Spencer, N. C.
Macfie, W. H. (4 EE)	Fairfield	Winnsboro
Maddox, W. B. (3 E)	Anderson	Anderson
Magill, R. V. (2 CE)	Greenville	Greenville
Mahaffey, C. R. (3 E)	Anderson	Townville
Mahaffey, H. T. (1 T)	Lancaster	Lancaster
Major, S. M. (4 A1)	Anderson	Belton
Maner, W. F. (4 A7)	Allendale	Allendale
Mann, J. M. (1 CE) .....	.....	LaGrange, Ga.
Mangum, W. S. (4 A2)	Marlboro	McColl
Marchbanks, J. C. (4 A7)	Anderson	Anderson
Marshall, L. E. (3 E)	Richland	Columbia
Martin, A. H. (2 E)	Lexington	Swansea
Martin, A. R. (2 CE)	Greenville	Greenville
Martin, C. R. (3 E)	Greenville	Greenville
Martin, F. M. (1 A)	Oconee	Pendleton
Martin, H. M. (2 Ar)	Marion	Mullins
Martin, Joe (2 A&S)	Oconee	Westminster
Martin, J. S. (2 A&S)	Fairfield	Strother
Martin, L. K. (4 A4)	Greenwood	Ninety Six
Martin, S. M. (S)	Oconee	Clemson College
Martin, W. E. (4 A1)	Anderson	Anderson
Martin, W. J. (1 A)	Greenwood	Greenwood
Martin, W. N. (4 ME)	Greenville	Greenville
Martin, W. T. (4 A4)	Spartanburg	Chesnee
Marvin, H. W. (4 EE)	Colleton	Whitehall
Mason, M. C. (1 A)	McCormick	McCormick
Mathis, Q. E. (2 E)	Florence	Timmons ville
Mattison, W. T. (2 A)	Abbeville	Honea Path
Maxwell, J. A. (4 EE)	Spartanburg	Spartanburg
Mayfield, J. E. (1 A)	Greenville	Marietta
Mayer, J. H. (3 CE)	Greenwood	Hodges
Mays, W. E. (3 Ar)	Pickens	Easley
Mazyck, E. H. (2 E)	Florence	Timmons ville
Mazyck, H. B. (2 E)	Florence	Timmons ville
Mealing, J. P. (4 ME) .....	.....	Augusta, Ga.
Meares, G. A. (3 A)	Greenville	Pelzer
Meares, G. C. (2 A)	Horry	Nichols
Meetze, A. W. (2 C)	Lexington	Leesville
Mellette, J. B. (1 E)	Sumter	Sumter
Mercer, C. W. (4 ME)	Georgetown	Georgetown
Mercer, F. Y. (2 E)	Georgetown	Georgetown
Merritt, M. L. (1 E)	Greenville	Greenville
Messervey, H. H. (2 A)	Charleston	Meggett
Middleton, L. B. (2 Ar)	Charleston	Charleston
Midkiff, R. B. (4 CE) .....	.....	Alexandria, Va.
Mikell, G. L. (3 E)	Charleston	Edisto Island
Miley, J. P. (1 E)	Hampton	Brunson
Milford, T. S. (3 A)	Edgefield	Johnston
Miller, C. T. (1 E)	Darlington	Hartsville
Miller, E. N. (1 A)	York	York
Miller, E. W. (2 E)	Marlboro	Bennettsville
Miller, H. S. (3 CE)	Oconee	Westminster

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Miller, J. D. (2 A)	Union	Jonesville
Miller, R. O. (3 A)	Union	Jonesville
Miller, T. C. (3 A)	York	York
Mills, J. A. (1 E)	Sumter	Sumter
Mills, R. B. (1 Ar)	Scotland Neck, N. C.	
Mitchell, M. F. (1 E)	Anderson	Belton
Mitchell, R. D. (3 CE)	Anderson	Belton
Mitchell, T. J. (3 C)	New Orleans, La.	
Miwa, S. (4 T)	Nagoya, Japan	
Mood, N. C. (1 E)	Sumter	Sumter
Mood, P. M. (1 E)	Sumter	Sumter
Moody, R. E. (1 A&S)	Greenville	Cleveland
Mooneyhan, C. S. (1 A)	Lee	Elliott
Moore, F. H. (3 A&S)	York	Rock Hill
Moore, F. W. (2 E)	Spartanburg	Spartanburg
Moore, J. D. (1 A)	Richland	Columbia
Moore, J. N. (4 A&S)	Anderson	Belton
Moore, L. B. (4 EE)	Inverness, Fla.	
Moore, V. E. (2 A&S)	Spartanburg	Duncan
Moore, W. F. (2 A)	Pickens	Calhoun
Moorehead, L. D. (2 A)	Anderson	Sandy Springs
Morgan, C. L. (S)	Oconee	Clemson College
Morrison, H. L. (2 A)	Charleston	McClellanville
Morrison, W. T. (2 A)	Anderson	Starr
Morton, E. H. (3 E)	Dorchester	Summerville
Motes, P. M. (1 A)	Laurens	Mountville
Mouledous, A. D. (2 PM)	Richland	Columbia
Moxon, J. G. (2 A)	Hampton	Varnville
Mozingo, A. S. (1 A)	Darlington	Hartsville
Mozingo, J. P. (1 E)	Lee	Bishopville
Mulherin, E. J. (1 T)	Augusta, Ga.	
Mundy, J. T. (4 EE)	Richland	Columbia
Munn, S. B. (1 A&S)	Kershaw	Jefferson
Murdoch, E. C. (3 A)	Abbeville	Antreville
Murphree, J. H. (2 A&S)	Pickens	Central
Murrah, E. S. (4 EE)	Union	Union
Murray, C. Q. (2 CE)	Charleston	Charleston
Nalley, R. F. (3 A)	Pickens	Easley
Neal, C. A. (1 E)	Greenville	Greenville
Neely, C. C. (2 E)	York	Ogdon
Neely, T. W. (1 A)	York	Rock Hill
Neetles, W. C. (2 A)	Sumter	Sumter
Newman, J. W. (1 A&S)	Oconee	Clemson College
Nichols, E. L. (1 PM)	York	Rock Hill
Nimitz, F. K. (2 CE)	Charleston	Charleston
Nimmons, J. G. (1 E)	Greenwood	Ware Shoals
Nivens, H. B. (1 C)	York	York
Norton, E. L. (4 A5)	Gibson, N. C.	
Norton, J. L. (1 T)	Dillon	Bingham
O'Cain, M. C. (1 E)	Orangeburg	Orangeburg
O'Dell, I. B. (3 A)	Pickens	Liberty
O'Dell, W. R. (4 A)	Pickens	Liberty
Odum, E. (1 A&S)	Saluda	Saluda
Oliver, E. F. (4 A2)	Williamsburg	Greeleyville
O'Quinn, J. D. (3 A)	Colleton	Williams

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Osteen, P. C. (2 A&S)	Anderson	Anderson
Osteen, W. E. (3 E)	Florence	Florence
Outzs, J. B. (1 E)	Edgefield	Edgefield
Owen, R. S. (1 A)	Orangeburg	Orangeburg
Owen, S. G. (4 EE)	Greenwood	Greenwood
Owen, F. N. (1 E)	York	Rock Hill
Padgett, C. E. (1 A)	Colleton	Williams
Padgett, E. E. (1 A)	Saluda	Saluda
Padgett, L. C. (4 EE)	Colleton	Green Pond
Padgett, O. D. (2 A)	Edgefield	Johnston
Page, B. L. (1 A)	Dillon	Lake View
Page, E. R. (1 PM)	Marion	Sellers
Palmer, R. F. (1 A)	Greenwood	Bradley
Pardue, W. A. (4 T)	Edgefield	Trenton
Parham, H. C. (2 A)	Charleston	Charleston
Parkman, L. M. (1 E)	Greenwood	Epworth
Parker, E. G. (S)	Pickens	Clemson College
Parker, G. F. (4 EE)	Florence	Ebenezer
Parker, J. R. (3 A)	Anderson	Iva
Parrott, W. G. (3 E)	Lee	Bishopville
Partridge, J. F. (4 ME)	Pickens	Pickens
Partridge, W. F. (2 E)	Pickens	Pickens
Patrick, C. H. (4 A3)	Hampton	Varnville
Patrick, C. S. (S)	Oconee	Clemson College
Patterson, H. F. (3 A&S)	Anderson	Williamston
Patterson, J. L. (1 T)	York	Rock Hill
Patterson, J. W. (2 T)	Florence	Timmons ville
Patterson, W. J. (1 E)	Greenwood	Ninety Six
Pearman, F. E. (3 A)	Anderson	Anderson
Pearson, W. B. (2 A)	Fairfield	Strother
Pegues, F. W. (1 A)	Marlboro	Kollock
Pepper, B. B. (3 A)	Anderson	Easley
Perry, C. F. (4 C)	Greenville	Greenville
Perry, W. E. (1 A)	Pickens	Easley
Phillips, P. C. (1 E)	Charleston	Ravenel
Philpot, C. P. (4 EE)	Laurens	Laurens
Pickens, R. O. (4 T)	Spartanburg	Spartanburg
Pitts, F. W. (1 E)	Newberry	Silverstreet
Pitts, I. S. (3 TIE)	Oconee	Westminster
Pitts, J. D. (3 A&S)	York	Rock Hill
Pitts, L. W. (2 A)	Saluda	Saluda
Player, J. W. (3 E)	Lee	Elliott
Player, W. W. (3 A)	Lee	Elliott
Plexico, M. E. (2 A)	York	Rock Hill
Plyler, A. A. (2 A)	Lancaster	Lancaster
Poag, J. R. (2 T)	York	Rock Hill
Poe, H. D. (3 E)	Chesterfield	Cheraw
Pollard, F. B. (1 T)	Greenville	Greenville
Pollard, V. B. (2 Ar)	Greenville	Simpsonville
Pollitzer, H. H. (1 A&S)	Beaufort	Beaufort
Poore, M. L. (3 A&S)	Anderson	Belton
Porcher, P. G. (4 A4)	Charleston	Mt. Pleasant
Powell, W. E. (2 E)	Aiken	Graniteville
Power, S. R. (2 Ar) .....	.....	Pineville, N. C.
Powers, G. F. (3 A)	Marion	Marion

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Pressley, O. K. (3 A)	Chester	Chester
Pressley, W. H. (4 A2)	Greenwood	Verdery
Price, G. W. (1 E)	Colleton	Walterboro
Prichard, B. E. G. (2 A)	Oconee	Westminster
Pridmore, R. G. (3 A)	Greenville	Greenville
Prim, J. M. (2 E) .....	.....	Brunswick, Ga.
Proffitt, H. L. (1 Ar)	Spartanburg	Spartanburg
Pruitt, E. A. (1 A)	Anderson	Belton
Pruitt, T. W. (2 E)	Anderson	Anderson
Pruitt, W. R. (4 ME)	Anderson	Anderson
Pursley, L. H. (4 A1)	York	York
Purvis, E. R. (4 A3)	Florence	Florence
Query, J. E. (1 E)	Spartanburg	Wellford
Ragsdale, C. H. (1 E)	Fairfield	Blairs
Ramey, E. L. (1 T)	Greenville	Greenville
Ramsay, W. T. (4 Ar)	Oconee	Madison
Ramseur, A. R. (2 T)	Oconee	Newry
Rawlinson, A. S. (2 A)	Clarendon	Davis Station
Ray, C. (2 A)	Oconee	Walhalla
Ray, C. E. (3 A)	Barnwell	Blackville
Redfern, W. H. (3 Ar) .....	.....	Charlotte, N. C.
Reese, L. W. (2 E) .....	.....	Emporia, Va.
Reeves, T. M. (3 A)	Colleton	Cottageville
Rentz, C. V. (1 E)	Hampton	Varnville
Reynolds, P. H. (4 EE)	Lee	Bishopville
Rhame, W. A. (1 A)	Kershaw	Camden
Rhem, J. S. (1 E)	Williamsburg	Rhems
Richardson, M. B. (3 CE)	Anderson	Pendleton
Richardson, T. C. (1 A&S)	Clarendon	Summertown
Richardson, W. H. (1 E)	Laurens	Laurens
Rickborn, W. W. (1 A)	Dorchester	Reevesville
Richey, B. R. (4 A3) .....	.....	Carteret, N. J.
Riddle, G. L. (1 E)	York	York
Ridgeway, E. J. (4 A)	Clarendon	Jordan
Ridgeway, W. A. (1 A)	Clarendon	Jordan
Ridlehuber, W. R. (1 A)	Greenwood	Greenwood
Riley, E. (2 A)	Orangeburg	Cordova
Ripplemeyer, H. A. (1 Ar)	Chester	Chester
Riser, H. B. (1 E)	Newberry	Whitmire
Robbins, L. L. (3 E)	Dorchester	St. George
Roberson, C. G. (1 A&S)	Florence	Florence
Roberson, S. R. (2 T)	Pickens	Easley
Robertson, E. H. (2 E)	Charleston	Charleston
Robertson, J. D. (1 C)	Anderson	Pendleton
Robinett, G. D. (2 CE)	Georgetown	Georgetown
Robinson, G. H. (1 T)	Newberry	Newberry
Robinson, J. H. (4 CE)	Greenville	Greenville
Rochester, M. C. (1 A)	Oconee	Salem
Rodgers, J. B. (2 CE)	Richland	Columbia
Rodgers, S. H. (3 CE)	Colleton	Walterboro
Rogers, A. J. (1 A)	Dillon	Fork
Rogers, A. M. (1 E)	Dillon	Dillon
Rogers, D. H. (1 E)	Marion	Mullins
Rogers, E. P. (1 A)	Marion	Mullins
Rogers, G. B. (1 A&S)	Anderson	Belton

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Rogers, J. I. (3 A&S)	Marlboro	Bennettsville
Rogers, J. K. (1 A)	Anderson	Pelzer
Rogers, J. T. (2 A)	Anderson	Pendleton
Rogers, L. A. (2 E)	Pickens	Easley
Rogers, L. T. (1 T)	Dillon	Dillon
Rogers, W. M. (3 E)	Marlboro	Blenheim
Roper, F. N. (1 Ar)	Laurens	Laurens
Rose, B. S. (1 T)	Greenville	Greenville
Rose, W. T. (3 E)	Clarendon	Sardinia
Roth, L. (3 E)	York	York
Rowell, J. O. (1 A)	Marion	Marion
Rowland, C. G. (1 A&S)	Pickens	Central
Rush, F. S. (2 T)	Lexington	Lexington
Russell, R. J. (2 T)	Charleston	Charleston
Sackman, G. W. (2 E)		Miami, Fla.
Sadler, J. K. (2 E)	Greenville	Greenville
Salley, G. S. (1 E)	Aiken	Salley
Salley, J. L. (2 A)	Orangeburg	Orangeburg
Salley, T. B. (1 A)	Calhoun	St. Matthews
Sample, J. W. (1 A)	Saluda	Saluda
Sample, W. F. (2 A)	Saluda	Saluda
Sander, L. F. (3 E)	Charleston	Charleston
Sanders, H. I. (4 EE)	Greenwood	Ninety Six
Sanders, R. W. (2 A)	Beaufort	Okatie
Sansbury, A. B. (2 E)	Florence	Timmons ville
Sartor, M. H. (2 A)	Union	Union
Satterfield, J. C. (1 T)	Anderson	Pelzer
Saunders, M. B. (1 A)	Colleton	Walterboro
Schumaker, P. D. (2 PM)	Oconee	Walhalla
Scott, M. C. (1 E)	Richland	Columbia
Scott, W. H. (3 A)	Laurens	Princeton
Scurry, J. F. (2 CE)	Newberry	Chappells
Seaborn, W. M. (4 CE)	Oconee	Walhalla
Searson, W. A. (1 Ar)	Spartanburg	Spartanburg
Sease, J. C. (2 CE)	Newberry	Prosperity
Seigler, N. P. (1 A)	Anderson	Starr
Shands, H. L. (3 A)	Florence	Ebenezer
Sharp, H. D. (3 T)	York	Leslie
Sharp, V. G. (2 T)	Anderson	Pendleton
Shedd, J. G. (3 T)	Fairfield	Monticello
Sheheen, E. P. (1 A&S)	Kershaw	Camden
Shelley, L. W. (4 AI)	Marion	Marion
Shelley, R. L. (2 A)	Horry	Tabor, N. C.
Sheppard, W. A. (1 E)	Aiken	Graniteville
Sherrard, H. R. (2 A&S)	Anderson	Belton
Sheriff, D. B. (1 A)		Eastanollie, Ga.
Sherman, D. B. (3 Ar)	Pickens	Clemson College
Shields, W. A. (1 A)	Richland	Columbia
Shillito, J. D. (2 E)	Bamberg	Denmark
Sholar, J. O. (4 ME)	Sumter	Sumter
Shuler, D. C. (1 A)	Orangeburg	Vance
Shull, W. G. (4 CE)	Greenville	Greenville
Simmons, E. F. (2 CE)	Orangeburg	Orangeburg
Simpson, J. G. (1 E)	Anderson	Anderson
Sims, E. F. (4 C)	Pickens	Central

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Singleton, J. A. (2 E)	Spartanburg	Spartanburg
Sloan, J. D. (1 E)	Spartanburg	Spartanburg
Sloan, J. D. (3 E)	Anderson	Pendleton
Smith, F. (2 A)	York	York
Smith, G. F. (2 E)	Pickens	Liberty
Smith, G. P. (1 T)	Greenville	Greenville
Smith, H. A. (3 A)	Lexington	Lexington
Smith, H. C. (1 E)	Newberry	Kinards
Smith, J. A. (2 PM)	Marion	Mullins
Smith, J. M. (1 E)	Greenville	Greenville
Smith, M. G. (4 ME) .....	.....	Atlanta, Ga.
Smith, R. B. (2 T)	Union	Jonesville
Smith, R. L. (3 A)	York	York
Smith, R. L. (4 ME)	Anderson	Starr
Smith, R. N. (2 CE) .....	.....	Savannah, Ga.
Smith, S. L. (4 EE)	Aiken	Graniteville
Smith, T. E. (1 A)	Kershaw	Bethune
Smith, T. L. (4 A5)	Marion	Marion
Smith, T. W. (4 A&S)	Saluda	Saluda
Smith, W. Z. (4 A)	York	York
Smoak, C. G. (1 E)	Orangeburg	Cordova
Smoak, K. A. (3 TIE)	Bamberg	Denmark
Smoak, T. T. (1 E)	Orangeburg	Orangeburg
Smyth, T. L. (2 T) .....	.....	Hendersonville, N. C.
Snowden, H. C. (3 A)	Williamsburg	Hemingway
Snyder, W. C. (2 E) .....	.....	South Bethlehem, N. Y.
Solomon, H. J. (1 E) .....	.....	Harms, Tenn.
Sowell, D. F. (1 A)	Kershaw	Camden
Speight, G. H. (1 PM) .....	.....	Hamlet, N. C.
Speth, E. B. (1 T) .....	.....	Augusta, Ga.
Springer, E. F. W. (4 EE) .....	.....	Scotia, N. Y.
Stacy, S. V. (3 A)	Cherokee	Gaffney
Stallings, W. K. (4 Ar)	Spartanburg	Spartanburg
Stalnaker, E. L. (1 T)	Greenwood	Greenwood
Stanton, F. B. (1 A)	Dillon	Fork
Steadman, C. L. (4 A5)	Spartanburg	Inman
Steinmeyer, J. H. (2 A)	Beaufort	Beaufort
Stephens, J. H. (1 E)	Spartanburg	Woodruff
Stevens, W. A. (2 Ar)	Anderson	Williamston
Stevens, C. B. (1 E)	Charleston	Martins Point
Stevenson, M. B. (3 A)	Marion	Marion
Stevenson, R. C. (3 E)	Fairfield	Winnsboro
Stevenson, W. B. (3 A)	Chester	Richburg
Stewart, T. C. (4 A)	Greenville	Simpsonville
Stewman, L. S. (4 CE)	Lancaster	Lancaster
Stockman, J. W. (2 A&S)	Newberry	Prosperity
Stogner, J. R. (4 T)	Darlington	Hartsville
Stone, G. M. (3 A)	McCormick	Willington
Stoppelbein, H. E. (4 EE)	Charleston	Charleston
Strange, H. G. (3 E)	Fairfield	Winnsboro
Stribling, R. M. (3 T) .....	.....	Rockingham, N. C.
Strickland, J. R. (2 E)	Hampton	Fairfax
Strickland, T. R. (1 PM)	Colleton	Stokes
Strowman, C. W. (3 A)	Orangeburg	Cameron
Stroud, E. W. (2 A)	Spartanburg	Woodruff
Stutts, R. T. (4 T)	Union	Union

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Stukes, T. E. (1 A)	Clarendon	Davis Station
Suber, C. (1 T)	Anderson	Williamston
Suber, J. C. (3 CE)	Greenwood	Greenwood
Swearingen, L. D. (1 T)	Edgefield	Trenton
Sweeny, R. L. (3 E)	Anderson	Anderson
Swofford, R. P. (2 E)	Cherokee	Gaffney
Taggart, C. L. (1 T)	Greenwood	Greenwood
Tarrant, W. H. (1 T)	Greenwood	Greenwood
Tatum, R. J. (3 A)	Marlboro	Tatum
Taylor, H. K. (4 A1)	Laurens	Laurens
Taylor, J. K. (1 A&S)	Laurens	Laurens
Taylor, J. M. (4 A5)	York	Rock Hill
Taylor, R. A. (3 A)	Greenville	Fountaain Inn
Taylor, W. I. (3 A)	Hampton	Varnville
Tedder, H. (1 E)	Darlington	Lydia
Thomas, C. H. (1 E)	Greenville	Greenville
Thomas, L. P. (2 CE)	Union	Carlisle
Thomason, G. L. (4 A5)	Laurens	Laurens
Thompson, A. G. (2 C)	Anderson	Starr
Thompson, S. W. L. (2 CE) .....	.....	Chattanooga, Tenn.
Thompson, W. A. (1 E)	Sumter	Sumter
Thompson, W. H. (1 A&S)	Oconee	Salem
Thompson, Z. V. (4 EE) .....	.....	Hendersonville, N. C.
Thomson, B. K. (3 E)	Spartanburg	Landrum
Tice, F. F. (3 E)	York	Rock Hill
Tice, J. D. (1 T)	Anderson	Honea Path
Tiencken, W. P. (3 CE)	Charleston	Charleston
Tilley, W. E. (2 CE)	Greenville	Greenville
Tillotson, J. E. (2 CE)	Darlington	Hartsville
Timmerman, W. A. (1 E)	Aiken	Graniteville
Timmerman, W. B. (2 PM)	Lexington	Batesburg
Timmerman, W. P. (4 A1)	Lexington	Batesburg
Tindal, L. N. (4 A&S)	Sumter	Pinewood
Tison, H. R. (1 A&S)	Allendale	Allendale
Tollison, D. L. (1 E)	Pickens	Central
Tomlinson, H. S. (2 E)	Florence	Olanta
Torchia, R. E. (2 CE) .....	.....	Savannah, Ga.
Touchberry, D. J. (1 E)	Clarendon	Summerton
Townsend, E. H. (2 A)	Charleston	Martins Point
Townsend, G. E. (1 T)	Anderson	Anderson
Townsend, T. P. (3 TIE)	Marlboro	Bennettsville
Troublefield, E. R. (2 A)	Sumter	Wedgfield
Trowbridge, J. E. (2 T)	Anderson	Anderson
Trotti, S. H. (1 A)	Chesterfield	Chesterfield
Truesdale, E. V. (4 A7)	Kershaw	Kershaw
Tucker, H. C. (2 E)	Sumter	Sumter
Truluck, C. M. (3 E)	Florence	Mothbridge
Turbeville, I. W. (1 E)	Williamsburg	Henry
Turner, C. M. (4 A7)	Aiken	Ellenton
Turner, H. (3 E)	Spartanburg	Landrum
Turner, I. E. (1 A)	Sumter	Mavesville
Turner, W. B. (4 A5)	Aiken	Ellenton
Turrentine, D. C. (2 T)	Greenville	Greenville
Tuten, H. M. (3 A)	Colleton	Jacksonboro
Tuten, W. L. (3 A)	Jasper	Early Branch

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Tyler, E. L. (4 EE)	Orangeburg	Broxton, Ga.
Tyler, W. S. (1 A)	Orangeburg	Orangeburg
Valentine, R. A. (1 A)	Orangeburg	Cope
Valley, J. B. (3 E)	Orangeburg	Elloree
Vance, J. (1 E)	Laurens	Owens
Van de Erve, J. F. (1 E)	Dorchester	Summerville
Vaughan, F. E. (4 A2)	Laurens	Fountain Inn
Vaughan, S. M. (3 T)	Anderson	Belton
Verdery, A. B. (4 A&S)	Orangeburg	Augusta, Ga.
Vincent, W. D. (3 TIE)	Orangeburg	Orangeburg
Wackym, M. A. (3 E)	Richland	Columbia
Walker, J. S. (1 E)	Oconee	Walhalla
Walker, W. A. (2 Ar)	Pickens	Easley
Wallace, F. D. (2 Ar)	Laurens	Laurens
Wallace, R. W. (4 A4)	Laurens	Gray Court
Waller, P. F. W. (4 ME)	Georgetown	Myers
Walsh, A. A. (4 EE)	Greenville	Greenville
Wannamaker, C. V. (1 A)	Lexington	Swansea
Wannamaker, T. R. (2 C)	Lexington	Swansea
Ware, M. D. (2 Ar)	Darlington	Darlington
Warner, H. D. (3 E)	Lexington	Lexington
Warr, E. L. (4 A&S)	Union	Jonesville
Warren, J. O. (2 PM)		Mt. Vernon, N. Y.
Watkins, A. W. (1 E)		Emporia, Va.
Watkins, D. W. (S)	Oconee	Clemson College
Watson, E. C. (4 EE)	Aiken	Windsor
Watson, E. L. (2 A)	Edgefield	Johnston
Watson, N. E. (1 A)	Greenwood	Bradley
Watson, S. P. (4 A7)	Spartanburg	Cross Anchor
Watts, J. G. (1 A)	Kershaw	Bethune
Watts, T. K. (2 A)	Kershaw	Bethune
Webb, A. A. (1 A)	Aiken	Aiken
Webb, E. von H. (3 T)	Anderson	Anderson
Webb, J. A. (4 A7)	Anderson	Anderson
Webb, T. W. (3 A)	Aiken	Aiken
Weeks, H. O. (2 A&S)	Aiken	Aiken
Welborn, J. D. (2 E)	Pickens	Easley
Welch, E. V. (3 A)	Orangeburg	Holly Hill
Welch, J. R. (2 E)	Richland	Columbia
Welch, W. D. (3 CE)	Richland	Columbia
Wells, C. N. (2 A&S)	Clarendon	Manning
Wells, G. G. (S T)	Greenville	Greenville
West, W. P. (3 E)	Charleston	Ft. Moultrie
Westberry, E. H. (1 A)	Dorchester	St. George
Whetstone, G. B. (4 CE)	Orangeburg	North
Whilden, J. E. (4 CE)	Sumter	Sumter
White, E. P. (1 E)		Asheville, N. C.
White, H. A. (4 A1)	Marion	Centenary
White, J. T. (1 E)	Chester	Chester
White, L. B. (4 CE)	Florence	Florence
White, L. M. (4 CE)	York	Rock Hill
White, L. I. (1 E)	Florence	Florence
White, P. S. (1 A)	Saluda	Saluda
White, R. B. (4 EE)	Darlington	Hartsville
Whitlock, H. W. (2 Ar)	Chester	Chester

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Whitten, S. E. (3 E)	Anderson	Pendleton
Whittington, F. B. (1 A)	Horry	Galivants Ferry
Wickliffe, B. I. (2 PM)	Oconee	West Union
Wideman, J. Y. (1 E)	Allendale	Fairfax
Wiggins, C. F. (1 A&S)	Florence	Effingham
Wiggins, R. C. (2 A)	Florence	Effingham
Wilburn, W. C. (1 E)	Cherokee	Kings Creek
Wilder, A. B. (3 CE)	Sumter	Mayesville
Wilkes, F. J. (2 E)	Orangeburg	Orangeburg
Williams, B. O. (S)	Pickens	Clemson College
Williams, G. P. (4 A7)	Mullins	Marion
Williams, H. L. (3 A)	Hampton	Brunson
Williams, H. T. (3 T)	York	Bowling Green
Williams, J. A. (2 A)	Bamberg	Bamberg
Williams, J. B. (1 E)	Greenwood	Ninety Six
Williams, J. C. (2 A)	Greenwood	Ninety Six
Williams, J. F. (2 E)	Sumter	Sumter
Williams, J. H. (2 E)	Hampton	Brunson
Williams, J. S. (4 ME)	Aiken	North Augusta
Williams, J. W. (1 E)	Pickens	Dacusville
Williams, R. L. (1 Ar)	Spartanburg	Trough
Williams, R. L. (1 E)	Charleston	Charleston
Williamson, B. (1 A)	Horry	Fair Bluff
Willimon, R. C. (3 A&S)	Greenville	Greenville
Willis, J. C. (2 A)	Marlboro	McColl
Wilson, B. S. (2 A)	Charleston	Martins Point
Wilson, C. D. (3 A)	Richland	Blythewood
Wilson, E. W. (2 A)	Richland	Blythewood
Wilson, G. V. (4 A1)	Orangeburg	Bowman
Wilson, J. A. (2 C) .....	.....	Roanoke, Ala.
Wilson, J. P. (1 A)	Allendale	Fairfax
Wilson, V. C. (1 E)	Newberry	Newberry
Wilson, V. L. (2 A&S)	Allendale	Fairfax
Wimberly, J. N. (2 C)	Orangeburg	Branchville
Windham, E. L. (2 A)	Lee	Lamar
Wingard, B. F. (4 A7)	Lexington	Lexington
Wingo, D. L. (3 E)	Greenville	Greenville
Wise, C. T. (3 C) .....	.....	Augusta, Ga.
Wise, G. H. (2 A)	Saluda	Leesville
Witherspoon, J. H. (3 A&S)	Sumter	Mayesville
Witherspoon, M. B. (3 E)	Sumter	Sumter
Witt, W. J. (1 A)	Orangeburg	North
Wolfe, J. E. (1 A)	Orangeburg	Rowesville
Wolff, L. M. (1 A)	Allendale	Allendale
Wood, J. R. (1 A)	Laurens	Ware Shoals
Wood, T. V. (1 E)	Cherokee	Gaffney
Woodham, H. D. (2 E)	Darlington	Timmons ville
Woodham, J. B. (3 A&S)	Lee	Bishopville
Woodruff, R. C. (2 E)	Greenville	Greenville
Woodward, H. E. (2 Ar)	Barnwell	Williston
Woodward, M. H. (4 CE)	Barnwell	Barnwell
Wooten, W. H. (4 A5)	Oconee	Fair Play
Workman, C. R. (3 A)	Laurens	Goldville
Wray, W. J. (3 CE)	York	York
Wright, C. D. (3 E)	York	Rock Hill
Wylie, A. P. (4 EE)	York	Rock Hill

<i>Name and Course</i>	<i>County</i>	<i>Residence</i>
Yarborough, J. H. (2 A)	Chester	Lowrys
Yeargin, J. A. (2 CE)	Laurens	Gray Court
Yon, J. H. (2 A)	Orangeburg	Orangeburg
Yongue, G. E. (2 E)	Pickens	Pickens
Young, C. A. (1 A)	Florence	Timmons ville
Young, E. G. (3 CE)	York	Rock Hill
Young, R. H. (2 CE) .....	.....	Atlanta, Ga.
Youngblood, D. F. (1 E)	York	Rock Hill
Zeigler, M. G. (2 CE)	Bamberg	Denmark
Zimmerman, C. G. (2 A)	Spartanburg	Woodruff

ENROLLMENT BY COUNTIES AND STATES FOR 1927-28

<i>County</i>	<i>New</i>	<i>Old</i>	<i>Total</i>
Abbeville	5	9	14
Allendale	5	9	14
Aiken	6	13	19
Anderson	39	82	121
Bamberg	3	16	19
Barnwell	2	7	9
Beaufort	4	6	10
Calhoun	2	4	6
Charleston	7	22	29
Cherokee	8	8	16
Chester	8	11	19
Chesterfield	2	3	5
Clarendon	9	8	17
Colleton	8	13	21
Darlington	11	22	33
Dillon	7	3	10
Dorchester	5	2	7
Edgefield	5	3	8
Fairfield	5	11	16
Florence	6	35	41
Georgetown	—	8	8
Greenville	34	51	85
Greenwood	19	15	34
Hampton	3	11	14
Horry	6	8	14
Jasper	1	1	2
Kershaw	7	6	13
Lancaster	2	9	11
Laurens	13	22	35
Lee	5	13	18
Lexington	6	15	21
Marion	4	17	21
Marlboro	3	10	13
McCormick	1	4	5
Newberry	12	5	17
Oconee	11	30	41
Orangeburg	22	25	47
Pickens	16	42	58
Richland	13	29	42
Saluda	13	10	23
Spartanburg	16	45	61
Sumter	11	26	37
Union	7	11	18

<i>County</i>	<i>New</i>	<i>Old</i>	<i>Total</i>
Williamsburg	2	6	8
York	16	39	55
Total for South Carolina	390	743	1135
Alabama	—	1	1
Florida	1	5	6
Georgia	11	21	32
Japan	1	—	1
Louisiana	1	3	4
North Carolina	5	13	18
New Jersey	—	1	1
New York	1	4	5
Tennessee	4	1	5
Virginia	1	2	3
Washington, D. C.	—	1	1
Grand Total	415	795	1212

SUMMARY OF SUMMER SESSION 1927

Teachers' Courses	97
College Make-Up Courses	33
Cotton Grading	27
Total	157

SUMMARY BY CLASSES AND COURSES FOR THE REGULAR SESSION

CLASS	Agriculture	Eng. Unclassified	Elec. Engineering	Mech. Engineering	Civil Engineering	Textile Eng.	Chemistry	Mech. & Elec. Eng.	Architecture	Arts & Science	Text. Ind. Educ.	TOTALS
Senior	84	...	39	18	32	13	2	1	11	19	4	223
Junior	77	61	...	...	28	14	8	...	12	22	9	231
Sophomore	110	86	...	...	45	36	5	...	20	24	...	326
Freshman	126	154	...	...	2	58	7	...	18	27	...	392
Pre-Med.	27	...	...	...	...	...	...	...	...	...	...	27
Special	...	...	...	...	...	...	...	...	...	...	...	13
Totals	424	301	39	18	107	121	22	1	61	92	13	1212

GENERAL SUMMARY OF ENROLLMENT FOR 1927-28

Regular College Session	1,212
Summer Session	157
Total Enrollment	1,369
Less individuals enrolled in both regular and summer sessions	33
Total individuals in attendance	1,336

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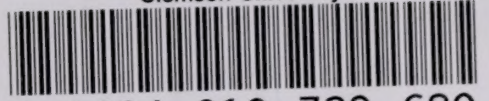
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Clemson University



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